from: appendix III

TECHNICAL REPORT TO THE MACAULAY STADIUM COMMITTEE
TRANSPORTATION IMPACT AND INFRASTRUCTURE REQUIREMENTS
relating to
FOURTEEN ALTERNATIVE STADIUM SITES

Barton-Aschman Associates Limited,
January 2, 1984.

INTRODUCTION

Initially, in excess of thirty sites were proposed to the Committee. Based upon the outcome of lengthy discussions and working sessions with the Committee, representatives of Woods Gordon, and other consultants, the original list was reduced to fourteen * alternatives. These are dealt with in the maps and data sheets that follow.

* CHM has attempted to acquire studies for each of those proposals - The following sheet lists The call #s of those items which have been received so far

JC May '84

	SITE (Alphabetical Order)	PROPONENT(S)	SITE NUMBERS ON MAP "A"
1.	AIRPORT SOUTH	York-Hannover Ltd. fo 711.55809713 Y59	6
2.	DOWNSVIEW	Committee and Several Individuals	14
3.	DOWNTOWN WEST	Committee	19
4.	EXHIBITION PLACE	Metropolitan Toronto and City of Toronto may 84 2 repts. - 1 rept. on Plan Shelf TOR 711.55809713 E24	16
5.	HALTON	Region of Halton and Hon. James Snow 711.55809713 H12	2
6.	HIGHWAYS 404 & 7	The Miller Group	25
7.	MARKHAM	Region of York and Town of Markham 711.55809713 M57	28
8.	MISSISSAUGA	City of Mississauga and Trillium Dome Corporation 725.82709 T67	3
9.	RICHMOND HILL	Town of Richmond Hill, Region of York, and A.N. Chapman Ltd. 711.55809713 R37	17
10.	SIX POINTS	Committee	8
11.	VARSITY STADIUM	Crang & Boake, Architects	18
12.	WHITBY*	Region of Durham and Town of Whitby 711.55809713 D77	32
13.	WOODBINE	Ontario Jockey Club TOR 711.55809713 S77	7
14.	YORK UNIVERSITY	York University - at cat may '84 - copy on dup shelf under 'sportsplex Ontario'	11

It should be noted that the individual maps on the following pages indicate the forecast directional distribution of **automobile trips only.** Transit and "other" person-trips listed in the tabulations which are present below each map are dealt with by means of modal split analysis.

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* Analysis results would apply generally to the three other sites proposed by the Region of Durham.

FEB 6 1984

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Stadium
Study
Committee

Room 375
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Toronto, Ontario
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(416) 965-3163
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February 3, 1984

Dear Mr. Davis:

In response to your request of late June, 1983, we are pleased to present our Report on various issues regarding a possible new stadium in the Metropolitan Toronto area.

During the course of our deliberations, we have been impressed by the enthusiasm and professionalism of the many individuals and organizations from Ontario and elsewhere that accepted our invitation to participate in the study. We are gratified to have been able to meet with many of those making submissions to obtain full appreciation of their proposals and suggestions. As well, we have been especially fortunate to have received advice and assistance from many experienced stadium people in cities across North America. Much helpful comment was also provided by officials at all three levels of government.

If a new stadium were to be built in the Metropolitan Toronto area, our *recommendations*, in summary form, are that:

- *the stadium should be located on lands that are currently part of the Downsview Airport on a site just to the north of the existing subway tracks, west of the Allen Road and south of Sheppard Avenue;*

continued.....

- the stadium should seat between 60,000 and 65,000 spectators and be designed to permit maximum flexibility to accommodate a wide range of uses with particular emphasis on major league sports. We estimate the structure itself to cost about $150,000,000; in addition, up to $50,000,000 will be required for necessary supporting facilities and transportation improvements;

- the stadium should feature a retractable roof capable of opening to a degree which would create the effect of an uncovered facility;

- the responsibility for financing the capital cost of the project be assumed by the three levels of government with significant participation by the private sector if at all possible;

- a crown corporation should be established by the Province of Ontario to own and manage the facility. Its board of directors should reflect the pre-eminent role of the Province. The design, construction and operation of the stadium should be the responsibility of a management team of the calibre required by a project of this magnitude;

- the planning and construction program should commence at such time to allow the stadium to be fully operational not later than home-opening day of the 1988 major league baseball season;

- appropriate project management techniques be adopted to ensure construction of the facility be completed on time and within budget,

- sources of operating revenues be preserved to the extent possible to meet annual operating expenses.

continued.....

We are privileged to have had this opportunity to assist you in your consideration of a most interesting and exciting development for the Metropolitan Toronto area and, indeed, for Ontario.

Respectfully,

Hugh Macaulay

Hugh Macaulay

W Bremner

William Bremner

Lionel Schipper

Lionel Schipper, QC

The Honourable William G. Davis, PC, QC,
Premier of Ontario,
Legislative Building,
Queen's Park,
Toronto, Ontario.
M7A 1A1

STADIUM STUDY COMMITTEE REPORT

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1. BACKGROUND

The Premier of Ontario, in a statement to the Legislature on June 21, 1983 and by subsequent Order-in-Council, established and appointed this Committee to make recommendations relative to a possible new stadium in or near Metropolitan Toronto. We were requested to submit our report as soon as possible - hopefully by late 1983.

We held our first meeting shortly after the Premier's announcement, and have met regularly and frequently since that time. However, the time and effort required to give adequate attention to the many complex factors involved, particularly with respect to location, made it impossible for us to deliver this report any earlier.

Our first official public act occurred on August 9th when we held a news conference to publish the mandate we had prepared, to answer questions and to announce formally that we would receive briefs and be available to meet with interested persons. At the same time, the announcement was supplemented by a similar invitation placed in several Ontario newspapers.

Almost 200 persons or organizations (for a list see Appendix I, Part vii) made submissions to us in writing and/or in person, including fourteen regional and/or local municipalities. We believe this is clear evidence of the high level of public interest in the deliberations of our Committee.

The mandate under which we operated read as follows:

> "To make specific recommendations to the Premier of Ontario as soon as possible with respect to the following issues relating to a new stadium in the Metropolitan Toronto area:
>
> - the uses the stadium could and should accommodate;
> - the type of structure and, in particular, whether and how it should be covered;
> - the location of the stadium, with particular emphasis on transportation;
> - the estimated capital costs of the stadium and necessary supporting facilities;
> - the methods of financing construction;
> - the sources of operating revenues and operating expenses;
> - the concepts of ownership and management; and
> - timing.
>
> The Committee invites all interested persons to make submissions in writing dealing with all or any of the issues referred to above. All information and material submitted to the Committee may be used by the Committee and may be made available to members of the public.
>
> It is not part of the Committee's mandate to make a recommendation as to whether or not a new stadium is necessary or desirable. This is not a formal tendering process but rather it is an investigative review of the most feasible alternatives from a number of perspectives. Thus, it is not the Committee's mandate to ask for, entertain or choose between specific and formal bids for actual ownership, construction or management of the stadium or any part thereof."

Based on our mandate and a wide range of related considerations, we then developed an extensive list of issues to be addressed by the public, the Committee and its consultants. This list is included in Appendix I.

At the same time, we retained a number of technical consultants to provide us with independent advice in their respective areas of expertise. These consultants were:

Woods Gordon, as general consultants, supported by:

Barton Aschman Associates, Transportation Planners and Engineers
John Bousfield Associates Limited, Consulting Town Planners

Helyar and Associates, Chartered Quantity Surveyors and
Construction Consultants
McLeod Young Weir Limited, Finance
Read, Jones, Christofferson, Consulting Engineers
Christopher Lang and Associates, Limited, Marketing

We visited ten North American sports complexes, including seven covered stadia and we reviewed financial and other data relating to all major domed facilities in North America. (See Appendix IV for relevant portions of the dossier we compiled on other stadia.)

We paid particular attention to the recent experience in Vancouver, where the Premier of British Columbia commissioned a similar study under the direction of Paul Manning on September 28, 1979, received the report of his Committee on December 15, 1979, initiated construction of a fabric domed stadium in late 1980, and officially opened BC Place Stadium on June 19, 1983, ahead of schedule and on budget.

The level of co-operation, the willingness to share insights and experience, and the promptness of answers to our inquiries, all demonstrated a high degree of co-operation. We are indebted to those who took the time to help us, including stadium officials in other cities, many individuals in various government departments and a wide range of experts in the private sector.

The specific conclusions of our deliberations are presented in the following pages, with much of the background for our analyses documented in the supporting appendices.

2. TIMING

A number of recent events have increased the public's interest in a new stadium, sparked originally by the efforts of Metro Chairman Paul Godfrey, and have created a sympathetic atmosphere towards its construction in the Metropolitan Toronto area. They include the horrendous weather that fans suffered through during the 1982 Grey Cup, the mid-1983 opening of Vancouver's exciting domed B.C. Place stadium, the Argonaut's 1983 Grey Cup victory, the outstanding 1983 season of the Blue Jays and the study of Exhibition Place commissioned by Metropolitan Toronto and the provincial government. We are not unique in this interest as several other major North American cities, including San Francisco, Tampa, Buffalo and Cleveland, have added to the continent-wide interest in a new covered stadium.

In addition, recent events in the economy make such a venture especially welcome now. For instance, the dramatic drop in the rate of inflation makes sound project planning possible. Also, it is estimated that the general economic benefits of such a major project could provide upwards of 7,000 construction-related jobs in Ontario, and, directly or indirectly, a further 6,000 jobs annually during the subsequent operation of the facility. When added to the other benefits, such as taxes paid to the three levels of government and the impact on local business activity, a new stadium would add impetus to the recovery of Ontario's economy.

Consequently, if there is to be a new stadium, we recommend that the necessary steps be taken toward its opening in time for the 1988 American League baseball season. When one considers everything that must be done, such as the securing of the involvement of three levels of government, the creation of the ownership vehicle, the hiring of the senior management team, the acquisition of land and its rezoning, the determination of the stadium design, the investigation of private financing, the negotiations with major tenants, the issuing of tenders, and the actual construction; four years is not a long time. However, we believe that, while this time frame may be challenging, it will contribute to a crisp, well-managed and business-like approach to the project by all parties involved.

3. LOCATION

Almost immediately, it became apparent to us that the most important and difficult issue confronting us was the location of the new stadium. Our initial impression was that there could be several attractive sites that would serve well the Metropolitan Toronto area. Everything we have learned in the past seven months has only served to reinforce that viewpoint. Having said that, we must add, however, that our task has not been an easy one.

As Mr. Manning stated so succinctly in his report to Premier Bennett, "Any site selection involves a series of imperfect choices". There is no site known to us in the Metropolitan Toronto area that does not have shortcomings. Every site worthy of consideration has rational, sincere and passionate supporters - and detractors. Moreover, several important factors relating to site are quite subjective. For example, does one's 'vision of Toronto' dictate a downtown, suburban or greenfield location; is it more important to provide relatively more convenient access for automobile passengers or transit passengers? Consequently, it is extremely difficult, if not impossible, to 'prove' on the basis of empirical evidence the superiority of one site over another.

Furthermore, it has become clear to us that there is no site in the Metropolitan Toronto area where, to use the words of the author of the B.C. Place Report once more, "In excess of 60,000 people can expect to arrive and depart within one hour time periods without a significant degree of disruption. It is a question of relative advantage".

3.1 Criteria

Before reaching our conclusions on location, we considered the experiences of other cities. Through our visits and discussions we learned a great deal and, most importantly, we learned that what may be clearly the best sort of location for another city will not necessarily be the best sort of location for the Metropolitan Toronto area. Not surprisingly, we have concluded that we must recommend that location which delivers the best level of service for our circumstances.

After six months of hearing the arguments on all sides of the issues, we came to the view that the highest rated site for the Metropolitan Toronto area should be:

- located centrally;
- reasonably accessible to rapid transit;
- served by at least one existing major expressway and several arterial roads;
- so situated that it would not impact unreasonably on its immediate neighbors and neighborhood;
- available and be capable of development quickly;
- a location that would enable the stadium to be readily marketed for the various uses contemplated;
- a large enough site to accommodate ancillary uses; and
- served by a transportation system that would work well on opening day and into the forseeable future at an acceptable cost.

Each of these criteria is described in more detail below.

i) Central Location

This criterion requires some explanation as the concept of centrality is not quite as simple as it sounds. Firstly, the new stadium must be central to its 'market area'. We believe it would be generally conceded that the prime market area includes all of six Regions; namely, Metropolitan Toronto, Durham, Halton, Hamilton-Wentworth, Peel and York. In addition, it would include about one-half of each of the Kitchener-Waterloo Region, the Niagara Region and Wellington County (essentially the City of Guelph).

This market area is forecast to have a total population of 4,700,000 people by the year 2000. Any analysis of centrality involves a reasonable weighting of both distance and travel time such that the total 'costs' (energy, time, etc.) of travelling to the stadium are minimized.

While it is difficult to quarrel with this general definition of 'central', there are many who argue that centrality is not only a geographic concept determined by population, distances and other data but also a concept related to one's vision or view of the Metropolitan area for the present and the future and how the stadium fits into that vision.

Some argue that central means downtown Toronto or very close to it. To some, a domed stadium would be an exciting and logical addition to the array of structures and activities that have made downtown the vibrant heart and soul of the whole area. To these same people, downtown is "where it's at", it's where sports in Toronto have been played traditionally and it's the location of the principal amenities of this area that would best attract and serve spectators. To them it's where the stadium must be even if there are higher costs and it is harder for some to reach or leave.

Others argue there is already too much emphasis on downtown development with its density and congestion, that sports fans particularly are automobile oriented, that a new stadium in a suburban location can accommodate automobiles more effectively, that patrons including out-of-towners and suburbanites should be able to attend an event at the stadium without fighting their way into and out of downtown and that a large structure such as this belongs in the more open and flexible spaces of the suburbs. In fact, they argue, the edges of Metro are more central to more people.

Our view is that, all other things being equal, we would favour a downtown location. But, alas, all other things are not equal.

ii) Reasonable Accessibility to Rapid Transit

The Metropolitan Toronto area is blessed with outstanding public transit systems which, traditionally, have been used heavily by area residents. Accordingly, the site should offer the potential of generating significant and reasonably convenient use of public transit by patrons of the stadium.

A site right on one of Toronto's subway lines would clearly be most attractive to, and likely generate the highest total of, transit passengers to events at the stadium. A site not on a subway line but served by direct transfer via scheduled streetcars and buses must be considered acceptable. Similarly, GO TRAIN service to a site must be considered a major plus. A less desirable form of transit, but transit nonetheless, is special and scheduled buses which, on a regular and reliable basis, would be available to connect the stadium to appropriate points on subway or GO TRAIN lines.

iii) Accessible By At Least One Existing Major Expressway and Several Arterial Roads

Arguably, adequate automobile access and parking will be the most vital elements in the success of the facility. The conventional wisdom throughout North America seems to be that sports fans prefer to travel by automobile to sporting events, even if that mode of transportation is more costly.

We agree with that position and, accordingly, it is our view that, while the site should be accessible at a reasonable cost and level of convenience by some form of public transit, priority should be given to the site's accessibility by automobile.

As discussed in Chapter 4, we recommend a stadium designed to seat a crowd of 60,000 - 65,000 persons based on individual proposals and experience elsewhere. The specific seating capacity will be based on actual site conditions and the engineering and architectural implications of the selected structure design.

However, capacity crowds are rare; it would be wasteful and excessively costly to design a transportation infrastructure to serve a capacity crowd. It is a more sensible and accepted practice to design for a weekday (evening) crowd of about 35,000 and for a weekend (afternoon) crowd of about 50,000. In the balance of this report these are referred to as the 'design crowds'.

Most of those who will come by car will plan to arrive in the hour before the scheduled starting time. Depending on the cost and level of transit service, 50% - 80% of the spectators will come by car. Therefore, depending on the particular site, the expressways and the arterial roads must be able to accommodate the resulting number of automobiles.

Furthermore, there is not much point in having a system of roads that encourages people to drive to the stadium, if there is no place for them to park with reasonable convenience when they get there. Accordingly, adequate parking (preferably more than adequate parking) at or within a reasonable walking distance of the site is essential. It is generally agreed, and it is our view, that surface parking is much superior to parking garages because it costs less to build and operate, it is easier to enter and it is a great deal easier to leave.

iv) A Site That Would Not Impact Unreasonably On Its Immediate Neighbours and Neighbourhood

It is hard to conceive of a 60,000-seat domed stadium that would not have a noticeable impact, wherever it is situated. It would be a massive structure occupying 10 to 12 acres (700 feet by 700 feet), and standing 180 to 200 feet high. Impact on the surroundings would result from the appearance of the structure and its associated parking areas, the glare from lighting at night events, the noise generated and the induced traffic and congestion on local streets arterial streets and the transit service in the vicinity.

The impact can be mitigated by the aesthetics of design and, perhaps, by putting part of the structure below grade. But, it cannot be eliminated. If there is to be a new stadium, it will be because it is perceived to be in the best interests of the greater

Metropolitan Toronto area generally. We believe that the ideal location would enable a stadium to be built that does not impact to an unreasonable extent on immediately adjoining land users and owners or on the quality of the general environment.

v) *Availability and Capability of Development Quickly*

Fortunately, a number of good sites were proposed to us by their owners so there is no question as to their availability for stadium purposes. Some are privately owned, some publicly. A publicly owned site probably has the advantage of being less expensive and, therefore, more acceptable to the public and to the funding governments.

Unfortunately, some other good sites which we investigated were unsponsored and their availability remains doubtful notwithstanding efforts on our part to obtain an answer one way or another.

As we have recommended in Chapter 2, if there is to be a new stadium, there are many reasons to start the process soon and complete it as quickly as possible. An otherwise excellent site that cannot be made available or purchased quickly, or the development of which is likely to be delayed significantly in the planning or development process, must be downgraded as a result.

vi) *A Location That Would Enable The Stadium to be Readily Marketed for the Various Uses Contemplated*

Another vital element in the success of the stadium will be its marketing. A successful marketing plan will involve many factors including, in our view, the public's perception of the stadium as a result of its location. People should want to go to it and should be comfortable when they get there. Its location should contribute to its ability to attract patrons and to its potential for synergism; that is, its potential to interact with other activities in the area to their mutual benefit.

vii) A Large Enough Site to Accommodate Ancillary Uses

A new stadium will likely serve the community for many decades. Wherever it is built, considerable sums will be spent in the beginning and, perhaps, over the years to improve the infrastructure that serves the facility. Accordingly, it seems to us to be desirable to select a site that is large enough to accommodate not only the stadium but also facilities directly related to the efficient and profitable operation of the stadium, such as surface parking. There should be space for ancillary uses, such as practice fields, and the flexibility for a new hockey/basketball arena some time in the future.

viii) An Infrastructure Serving the Stadium That Would Work Well on Opening Day and Into the Forseeable Future at an Acceptable Cost

A new stadium will take several years to plan and complete. It will cost a lot of money and receive a great deal of public attention. Many people will look forward with great anticipation to opening day and they will expect it to 'work' reasonably well from that day onward.

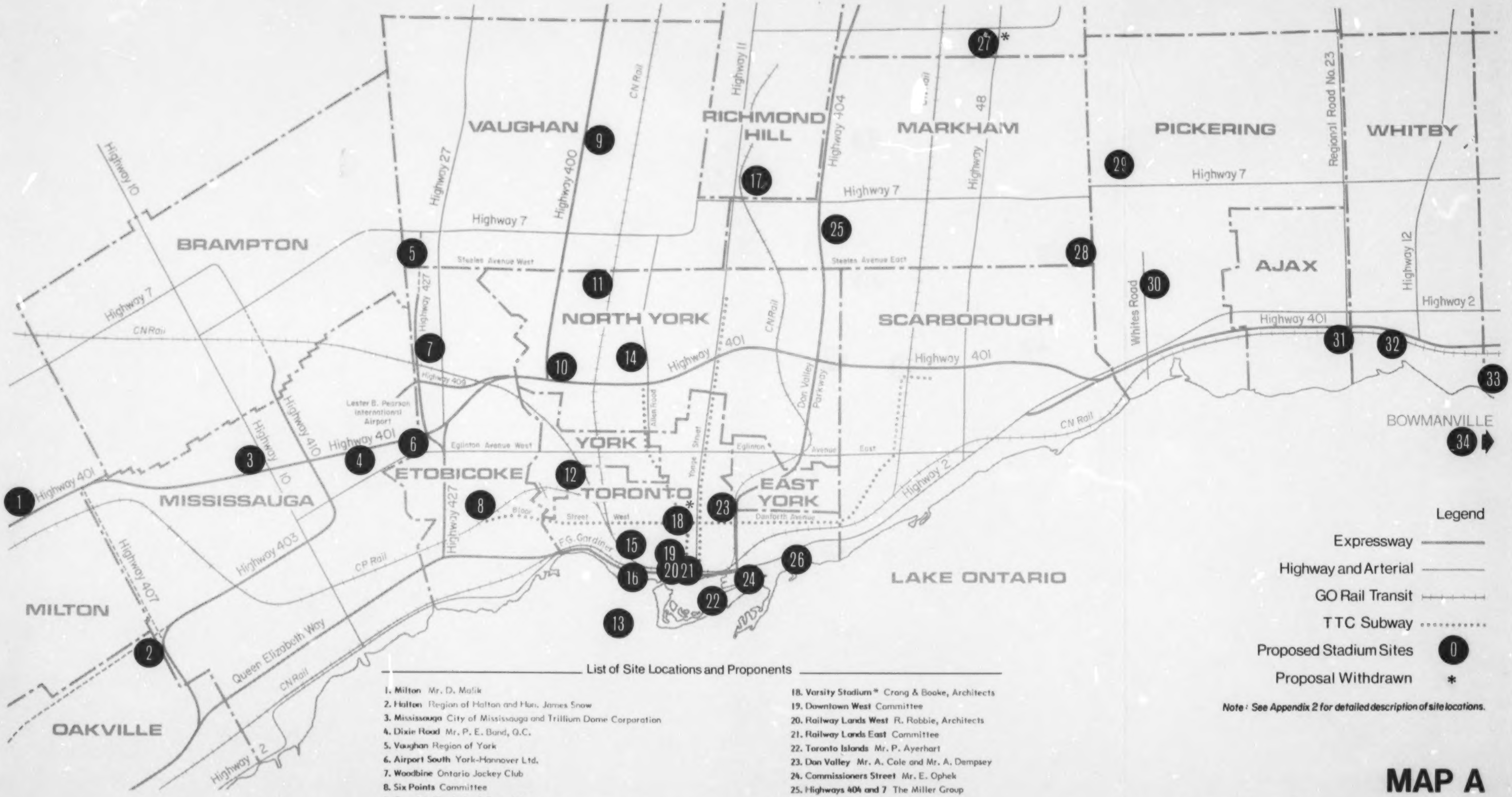
Any site that may be selected will require some upgrading of both on-site and off-site transportation and servicing facilities. In our view, however, it would be an error to select a site which will only be workable at an acceptable level on opening day if excessive amounts must be spent on infrastructure which cannot be related to other needs, or if one cannot be assured that such improvements, whatever the cost, can be completed by opening day or shortly thereafter.

At the same time, however, that which is put in place for opening day must be seen to be effective into the foreseeable future without relying upon vague or distant plans that may or may not become realities. Similarly, the location should be perceived as one that is not likely to be 'crowded out' or otherwise be subjected to factors that may affect it adversely in the future.

3.2 Recommended Sites

We received many creative and well-considered submissions which established to our satisfaction that there is no shortage of potentially good sites for a new stadium. Map A shows the location of all sites proposed to and/or considered by us. In coming to our conclusions, we have considered every proposal put before us, fairly and with open minds and we have endeavoured to apply the criteria in a consistent manner. Where we have considered it appropriate in the interest of the process, we have taken our own initiatives and made certain assumptions.

This has been necessary since we have not been asked actually to negotiate for the purchase of the land, have not received commitments for funding from any level of government or the private



Note: See Appendix 2 for detailed description of site locations.

List of Site Locations and Proponents

1. **Milton** Mr. D. Malik
2. **Halton** Region of Halton and Hon. James Snow
3. **Mississauga** City of Mississauga and Trillium Dome Corporation
4. **Dixie Road** Mr. P. E. Bond, Q.C.
5. **Vaughan** Region of York
6. **Airport South** York-Hannover Ltd.
7. **Woodbine** Ontario Jockey Club
8. **Six Points** Committee
9. **Canada's Wonderland** Committee
10. **Highways 400 and 401** Mr. J. Ross
11. **York University** York University
12. **Keele Street and St. Clair Avenue West** Mr. P. Simone
13. **Floating Stadium** Mr. R. Hubler, Jr.
14. **Downsview** Committee and Several Individuals
15. **Lamport Stadium** Mrs. A. Eyres
16. **Exhibition Place** Metropolitan Toronto and City of Toronto
17. **Richmond Hill** Town of Richmond Hill, Region of York, and A. N. Chapman Ltd.
18. **Varsity Stadium*** Crang & Booke, Architects
19. **Downtown West** Committee
20. **Railway Lands West** R. Robbie, Architects
21. **Railway Lands East** Committee
22. **Toronto Islands** Mr. P. Ayerhart
23. **Don Valley** Mr. A. Cole and Mr. A. Dempsey
24. **Commissioners Street** Mr. E. Ophek
25. **Highways 404 and 7** The Miller Group
26. **Greenwood** Committee
27. **Highways 47 and 48*** Lennox Real Estate Ltd.
28. **Markham** Region of York and Town of Markham
29. **Pickering Airport** Committee
30. **White's Road, Pickering** Region of Durham
31. **Ajax** Region of Durham
32. **Whitby** Region of Durham and Town of Whitby
33. **Oshawa** Region of Durham and City of Oshawa
34. **Bowmanville** Mr. M. Prout

MAP A

Locations of Proposed Stadium Sites

sector and have not been in a position to negotiate with any of the municipalities concerned or the zoning or transportation authorities.

We believe that there are three sites which are to be preferred as being the best for the Metropolitan Toronto area. They are, in order of preference:

1. Downsview Airport - specifically at least 80 acres of land lying immediately west of the Allen Road, north of Wilson Avenue and the TTC subway yards and south of Sheppard Avenue in the City of North York.
2. Ontario Jockey Club (Woodbine) lands comprising about 140 acres bounded on the east by and immediately adjacent to the existing racetrack facilities, on the west by Highway 427 and on the north by Rexdale Boulevard in the City of Etobicoke.
3. Exhibition Place specifically about 10 acres immediately adjacent to the east end of the existing stadium and other lands within and outside the Exhibition Place grounds for parking.

3.2.1 The Most Preferred Site - Downsview

It is interesting to note that in 1971 a special committee of the Metropolitan Toronto Council reported on the feasibility of a sports complex for the Toronto-Centered Region and stated:

> "In terms of overall suitability the Downsview site has the most potential. Its suitability is conditional on a number of key decisions pertaining primarily to the availability of land, highway connections and rapid transit facilities ....However, the probability of having TWO modes of high capacity transportation (i.e., rapid transit and the freeway network) AND adequate land area exists at Downsview and nowhere else. For these reasons Downsview is recommended as the preferred site for the location of the complex".

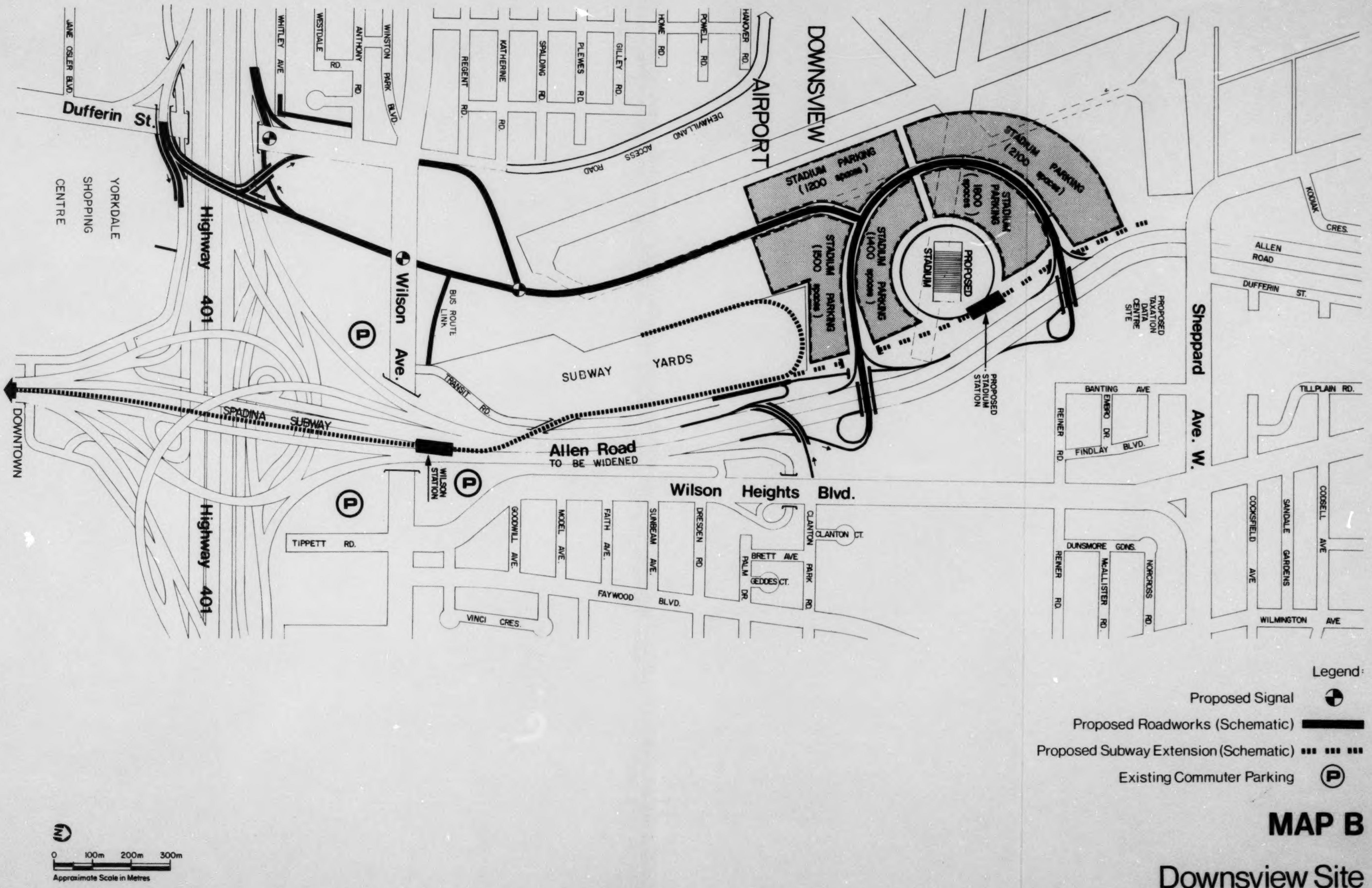
Although availability of this land is still unconfirmed, since that report was written the Spadina Subway line has been installed, Highway 401 has been expanded and the Allen Road has been built. The particular site shown in Map B, with the modifications and additions to the roads in the area and to the subway, all as shown, is an excellent one and comes closest to the ideal site described earlier for the following reasons:

Centrality

i) It is centrally located with respect to the market area although it is some distance from downtown Toronto. While it is not as well-located to downtown as Exhibition Place or some other sites, it is nonetheless, the most readily accessible of all sites considering the entire market area it must serve.

Public Transit Access

ii) We are advised that the Spadina subway can be extended 1,500 feet from the end of the existing tracks and thereby stop right inside or directly beside the stadium. We are further advised that the Spadina subway line and the transit services which regularly interconnect with it could easily carry up to 25,000 people per hour to and from a Downsview stadium. No other site except Varsity Stadium or Six Points would match Downsview's direct access to rapid transit. The 'design' crowd expected for a weekday event is 35,000 and for a weekend event is 50,000. If the subway is fully utilized it would mean that the roads and parking facilities would be required to accommodate only 10,000 people for a weekday event and 25,000 people on a weekend day. This is very unlikely to



Legend:

Proposed Signal	◒
Proposed Roadworks (Schematic)	▬
Proposed Subway Extension (Schematic)	▪▪▪ ▪▪▪ ▪▪▪
Existing Commuter Parking	Ⓟ

MAP B

Downsview Site

ever happen because, as our consultants advise, the private automobile is likely to remain the preferred mode of transport (estimated to represent about 60% of attendance on weekdays and 50% on weekends). Accordingly, they estimate that about 9,000 patrons would use the subway on weekdays and in the order of 15,000 on weekends. The balance of public transit users, about 10,000 persons on a design weekend and 5,000 persons on a design weekday, would come by scheduled and chartered buses.

Automobile Access

iii) Highway 401 passes about one mile south of the site. This is part of the Toronto by-pass section of Highway 401 which is reputed to be one of the best designed high capacity freeways in North America with its unique use of the core-collector system and up to 16 lanes of traffic. The Allen Road provides direct access north from Highway 401 to the site. The proposed new north-south road shown in Map B would further facilitate the transfer of cars coming from the west along Highway 401 to the site. North of the site, Sheppard and Finch Avenues connect to Highway 404 on the east and Highway 400 on the west and to all the major north/south arteries in between those expressways.

We are aware of the fact that Highway 401 is heavily used across the north end of Toronto. We are aware also that a Downsview stadium would add significantly to the volume of traffic on that section of road. We are advised, however, that Highway 401 will be able to handle this extra volume without unduly decreasing its efficiency. Furthermore, because this site can be reached from all four main points on the compass, traffic management systems already planned for Highway 401 will be particularly effective in accommodating stadium traffic under normal conditions and in case of an accident in the area.

By and large, the timing of events at the stadium will not conflict with the peak periods of Highway 401 use, that is weekday evening starts at 7:30 p.m. and weekends. There can be no doubt, however, that a Blue Jay twi-night doubleheader against the Yankees or another contending team at 5:30 on a sunny summer Friday afternoon would create major problems. But these occasions would be few and far between and probably can be eliminated totally by thoughtful scheduling of events.

Although the site is fairly close to Highway 401, it is sufficiently separated from the highway that traffic management techniques (e.g., variable - message advisory signs relating to where parking is available, the 'best' internal circulation roads to follow on the way into and out of the area, etc.) will enable full advantage to be taken of the flexibility of the road system. Also, the capacity of the network comprising the Allen Road, Transit Road, the proposed new north-south road from the modified Dufferin/401 interchange, and other local roads (existing and proposed) should prevent traffic backups from forming on Highway 401 itself.

Finally, with specific reference to the critical outbound surge of traffic following a stadium event, the network just described and shown in Map B should be able to feed vehicles onto all major egress routes without incurring undue delays. We did express concern about southbound traffic on the Allen Road following a stadium event but our consultants advised us that this will not be a serious problem.

The specific site shown in Map B dedicates at least 60 acres for surface parking. This will accommodate at least 8,000 cars or between 22,500 and 25,000 patrons (depending on the event) out of a design crowd of 50,000. Based on the estimates we have received as to the transportation split to be expected, this means that virtually everyone who drives to the stadium will find a parking space on site within a five to six minute walk from a stadium entrance. The use of other existing parking spaces in nearby large lots at the new tax centre and at the Park and Ride lot at the Wilson Station would increase parking capacity to easily meet the additional demands of a peak crowd.

Impact

iv) While the residents of the immediate area will be impacted to some extent, the area is already affected by Highway 401, the Allen Road, The Spadina Subway, Downsview Airport, Yorkdale Shopping Centre and some industry. It is a mixed use area and the impact on the closest residential neighbourhoods can be mitigated by the installation of landscaped screening and other works, and by traffic control measures. We believe the stadium will be visible from Highway 401 so it will be seen by a lot of people. Yet Highway 401 and Wilson Avenue on the south, the Allen Road on the east, Sheppard Avenue on the north and the balance of the Airport lands on the west will all act effectively as buffers so that the general environmental impact should also be reasonable.

Availability

v) Regrettably we cannot be certain that this site is available. At the present time it forms part of Downsview Airport which is owned by the federal government. We have had discussions with federal officials, and although we have been encouraged by these discussions to believe that this site may well be available, we have been unable to secure a firm commitment. We believe, however, that its availability or unavailability can be ascertained by the Province fairly quickly. If it is available, its acquisition can be quickly negotiated since it is owned by the federal government. There should not be any undue delay involved in obtaining the necessary approvals nor do we have reason to believe that approvals will be unduly difficult to obtain, although there is bound to be some opposition to the project.

Unlike most other sites, Downsview was investigated on our own initiative. As in the case of other unsponsored sites, we did not attempt to negotiate with any municipal officials. Accordingly, the City of North York, in which the land is situated, did not participate in our deliberations either in support of or in opposition to this site. However, we are not aware of any official North York opposition to a stadium on this site.

Marketing

vi) There is no doubt in our minds that, all things considered, a stadium on the edge of downtown Toronto would be the most easily marketable. We believe, however, that a stadium at Downsview will be well-accepted within its market area. It is easily reached by car from anywhere inside or outside Metro and the provision of direct access to the Spadina subway line will be feasible at acceptable cost. Downtown Toronto will be an easy trip by car or transit. From this location, it will be a convenient trip by car to virtually any other destination within the market area. In time, we believe that the people will identify with this site as they have in the past with Maple Leaf Gardens, Maple Leaf Stadium, Varsity Stadium and CNE Stadium.

It must be acknowledged that a stadium at Downsview or for that matter, any site other than Exhibition Place puts that new stadium in direct competition with the existing stadium at Exhibition Place. It is not possible at this time to quantify the effect of this competition on a new stadium's revenues. But, as long as CNE Stadium exists, it will attract some events that might otherwise have gone to the new stadium.

vii) *Flexibility for Ancillary Uses*

Depending on the future use of the Downsview Airport it is possible that there will be more than sufficient land available not only for the stadium itself but also for the maximum number of surface parking spaces, practice fields, a possible new arena and other ancillary facilities.

Even if there were not a lot of extra land available west of the Allen Road, there is a 65 acre parcel lying immediately east of the Allen Road, which technically forms part of the Airport, all or part of which could likely be acquired for one or more ancillary purposes. It seems particularly well suited for practice fields and perhaps some facilities for amateur athletics and neighbourhood use under the control of the City of North York.

Future Access Conditions and Costs

viii) We have assumed that the cost of the stadium structure will be similar at all three sites, although there is some evidence that these costs may be higher at Exhibition Place.

Any land on which the Stadium and its related facilities sit will have a deemed value. In the case of Exhibition Place and Downsview, this value may not translate into an actual stadium cost because these lands are presently publicly owned. Subject to negotiation there is more likely to be an actual land cost with a stadium at Woodbine.

It has been difficult for us to put a precise dollar figure on the land component although we think it is fair to attribute the largest extra land cost factor to Woodbine, the lowest to Exhibition Place with Downsview somewhere in between.

The additions and modifications that are required to the transportation infrastructure seem capable of being designed and implemented well within the shortest time frame in which one could expect the stadium to be built.

The transportation infrastructure costs which can reasonably be attributed as a cost of the stadium at Downsview have been estimated for us at $40,000,000. made up as follows:

- to extend the subway and to build a new station at the stadium;
- to install a new north-south access road linking the site to Highway 401 at Dufferin Street and to build ramps off the Allen Road to the site; and
- to widen Allen Road between Highway 401 and Sheppard Avenue West.

We consider the combined land and infrastructure costs to be well within acceptable limits on both a comparative and absolute basis. Furthermore, we have not been able to identify any further improvements that should or must be made at some future time to enable a stadium on this site to function effectively for an indefinite period.

As the Metropolitan Toronto area grows, background traffic on Highway 401 and the Allen Road will increase. However, the advice we have received is that any such increase anticipated in the next 20 to 30 years would be manageable.

3.2.2 The Other Two Preferred Sites: Woodbine and Exhibition Place

As we became more familiar with the key elements relating to site and the relevant characteristics of the three preferred sites, Downsview emerged clearly as the most suitable site. On the other hand we continued to wrestle with the comparative advantages and disadvantages of Woodbine and Exhibition Place up to the last moment. We were very much attracted to Exhibition Place because of the major advantages related to its location on the waterfront and on the edge of downtown Toronto. But, is it otherwise suitable as the site for the new stadium?

We believe it would be generally agreed that, by and large, patrons of Exhibition Stadium now encounter significant levels of inconvenience getting to and leaving events at the Stadium. We have concluded that, unless there were reasonable prospects to improve that condition on a timely basis without incurring excessive costs, we were obliged to reassess the importance of the stadium being located near downtown.

Neither the representatives of Exhibition Place nor our own consultants have been able to make a persuasive case to us that the quality of accessibility for automobiles or transit passengers can be improved at a reasonable cost. To the contrary, we have concluded that the transportation improvements suggested by the proponents of Exhibition Place, of which we have estimated $44,000,000 to be attributable to the stadium (see table on page 44), would not reduce the general level of inconvenience. On balance, we came to prefer Woodbine over Exhibition Place notwithstanding our downtown orientation.

Woodbine

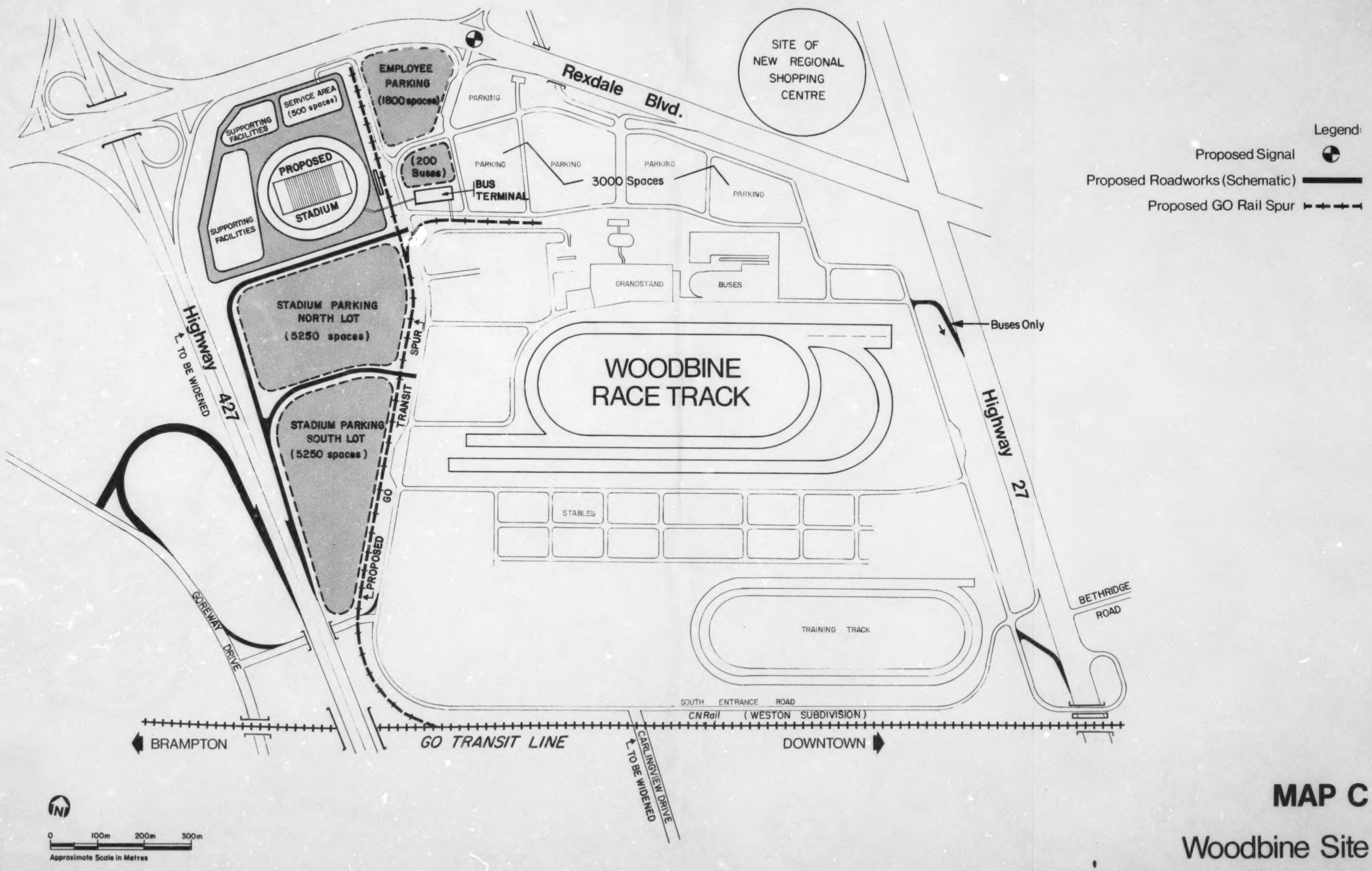
Once again it is worth quoting from Metro's 1971 Report in which the authors stated:

> "In the event that the land acquisition and transportation problems associated with the Downsview site cannot be resolved satisfactorily the site adjoining Woodbine Racetrack is recommended as the best alternative site. This site is not in public ownership, therefore substantial acquisition costs are likely to be involved but, provided that suitable scheduling arrangements can be arranged, there may be economies in land acquisition by shared use of some of the parking areas with the racetrack. However, if the stadium is domed this implies a greater number of event days and it may not always be possible to avoid major stadium and racetrack events from coinciding and such situations could give rise to serious traffic congestion in the area at arrival and departure times".

The conclusion made thirteen years ago is in large measure still valid today. While the drawbacks noted above are still cause for some concern, the following comments on each of our criteria (especially in paragraph iii) will explain why the proposed Woodbine site, as shown in Map C, is our second choice.

Centrality

i) It is centrally located with respect to the market area generally but, in our view, is not as well located with respect to Toronto as either Downsview or Exhibition Place because of both its distance from the heart of the City and its location at the extreme north west corner of Metro. Nonetheless, it is accessible by automobile from the entire market area it must serve and, in terms of travel time, it is within an acceptable distance from downtown.



MAP C

Woodbine Site

Public Transit Access

ii) Woodbine's biggest drawback in our view is its limited access to rapid transit. The most recent statistics indicate that only 8% of all racing fans use the TTC to get to the races at Woodbine and, of course, they all come by bus. The Jockey Club submission, as illustrated in Map C, envisages a spur line coming off the Georgetown GO TRAIN line with three platforms at the site. In addition, their plans include a bus terminal adjacent to the stadium similar to the Yorkdale GO inter-regional bus terminal to be utilized by TTC and inter-regional buses. As well, there would be a designated area provided for charter bus services.

Not unexpectedly, the Woodbine proposal does not count on direct rapid transit to the site in the forseeable future, nor do we. Woodbine's traffic consultants concluded that about 20% of stadium patrons (12,000 persons if there is a capacity crowd or 6,000 to 7,000 persons for a normal weekday event) would use the transit facilities described above and that sufficient buses and GO trains would be available to handle them.

Our traffic consultants do not have any major disagreement with this conclusion. However, they consider 20% to be on the high side and believe that, while the service may be offered, people may not be inclined to use it. They are also concerned about the effectiveness of a spur GO line built at grade level and serviced only by the lightly used Georgetown line. Furthermore, they feel that actual attendance realized at a stadium in the Metropolitan Toronto area, as opposed to forecast attendance, will be sensitive to the level and quality of public transit service afforded. To the extent that the actual use of public transportation falls below forecast levels there will be a corresponding increase in the burden placed on the roads.

Automobile Access

iii) One of the principal strengths of the Woodbine site is its ability to accommodate large numbers of automobiles. It is served directly or indirectly by Highways 401, 409, 427 and 27 as well as by Belfield Road, Dixon Road, Carlingview Drive, Martingrove Road and Rexdale Boulevard. The key elements of this road system are in place and improvements such as the extension of Highway 427 north to Highway 7 and the westward extension of Finch Avenue to Highway 427 are already committed. The site is easily reached by car from any direction with several alternative routes available either by choice or by virtue of the traffic management systems we expect to be installed.

The site that would be acquired for the stadium totals 140 acres of which about 70 acres would be used for surface parking of about 10,000 cars. In addition, on most weekdays 9,000 surface parking spaces dedicated to the racetrack would likely be available, although this number of additional spaces would be reduced to 5,500 most weekends. Based on our estimated transportation split, which assumes 85% of all fans coming by car on weekdays and 75% on weekends, the supply of surface parking spaces should exceed demand at all times.

The anticipated volume of traffic generated by the stadium when combined with background traffic, the traffic generated by the racetrack and the soon to be built regional shopping centre at Highway 27 and Rexdale Boulevard cannot be accommodated by certain roads without slowdowns and other inconveniences or without major improvements and additions. These would include the widening of Highway 427 from Dixon Road to Rexdale Boulevard, the widening of Carlingview Drive from the site south to Dixon Road and new access ramps from the site to Highway 427. The cost of these improvements is about $8,000,000 which is attributable to the stadium; it is expected that they can be completed by the time the stadium is operational. These improvements are relatively modest both in terms of the time required to complete them and their cost.

There is a likelihood that conflicting racetrack/stadium events will prove to be a difficult burden even for the expanded transportation infrastructure. The problem will be most acute on weekends in those months when the football/baseball seasons overlap with racing dates. Based on the 1983 schedules, there were 11 days when such conflicts would have occurred. The major bottlenecks are expected to occur on Highway 427 between Highway 409 and Dixon Road and on Rexdale Boulevard where it intersects Highway 27. We are advised that these problems cannot be remedied fully by practical physical changes. The best solution would be to reschedule the starting times of either stadium events or the racing card. If this cannot be done, an additional element of inconvenience is likely to be experienced on those days.

On balance, however, Woodbine provides very good access and surface parking for automobiles and their passengers. We consider this to be a significant advantage having regard to our perception that stadium patrons will prefer the automobile as their mode of transportation.

Impact

iv) In the matter of the impact of the stadium on adjoining users and on the general environment in the area, Woodbine earns the highest marks of any of the preferred sites. The total facility would not seem to impact unduly on existing residential areas in the vicinity, including the new residential neighbourhood which is soon to be developed immediately to the north since they can be 'screened' by landscaping. However, the addition of a new stadium and the new regional shopping centre, when combined with other growth in the area, might strain the capacity of the arterial road system which serves the area surrounding the Ontario Jockey Club property.

Availability

v) An advantage of this site is its ownership by the Ontario Jockey Club, a single owner, the trustees of which have affirmed to us their willingness to make the site available immediately for stadium purposes. In all probability this site would face relatively little opposition and the planning permissions required should be obtainable within an acceptable period of time.

We have some concern that there is potential for conflicts as a result of the operation of two separate enterprises by two separate corporations on what is essentially one property. Careful co-operation would be required.

Marketing

vi) We believe that the Woodbine site will be as marketable as Downsview but may not offer the same marketing opportunities as Exhibition Place. Furthermore, there are some who will be concerned about the proximity of the stadium to the racetrack. However, in our view, horse racing is a legitimate, accepted and popular form of entertainment in Ontario. We believe the manner in which the Ontario Jockey Club carries on its business is exemplary and that the atmosphere surrounding the racetrack is compatible with stadium events.

Woodbine already has a high profile even for many of those residents of the market area who do not frequent the racetrack and we believe it would be a well-accepted site. However, its distance from downtown Toronto is a drawback in our opinion. Another drawback, as in the case of Downsview, is that a stadium at Woodbine would have to compete with the CNE Stadium as well as other competitive facilities in the region.

Ancillary Uses

vii) A 140 acre site at Woodbine offers more than enough land in the short and long term for the stadium, ancillary uses, and even a hockey arena. This will, of course, include ample surface parking, the revenue of which would accrue to the stadium corporation.

Future Access Conditions and Costs

viii) The cost of the land will have to be negotiated. If market value is paid, the total purchase price will be a very significant cost factor. However there is a value to the Ontario Jockey Club in having a sports complex on the site and this value could be reflected in the price that would be paid for the land. The infrastructure costs which can reasonably be attributed as a 'cost' of the stadium have been estimated for us at about $12 million. These consist almost entirely of the road improvements referred to above plus the cost of the GO Train spur line. Our best estimate is that the total of infrastructure and land costs will be the lowest amount of any of the preferred sites.

Furthermore, as in the case of Downsview it is our belief that no further expenditures of major consequence will be required in the forseeable future to keep a Woodbine stadium viable.

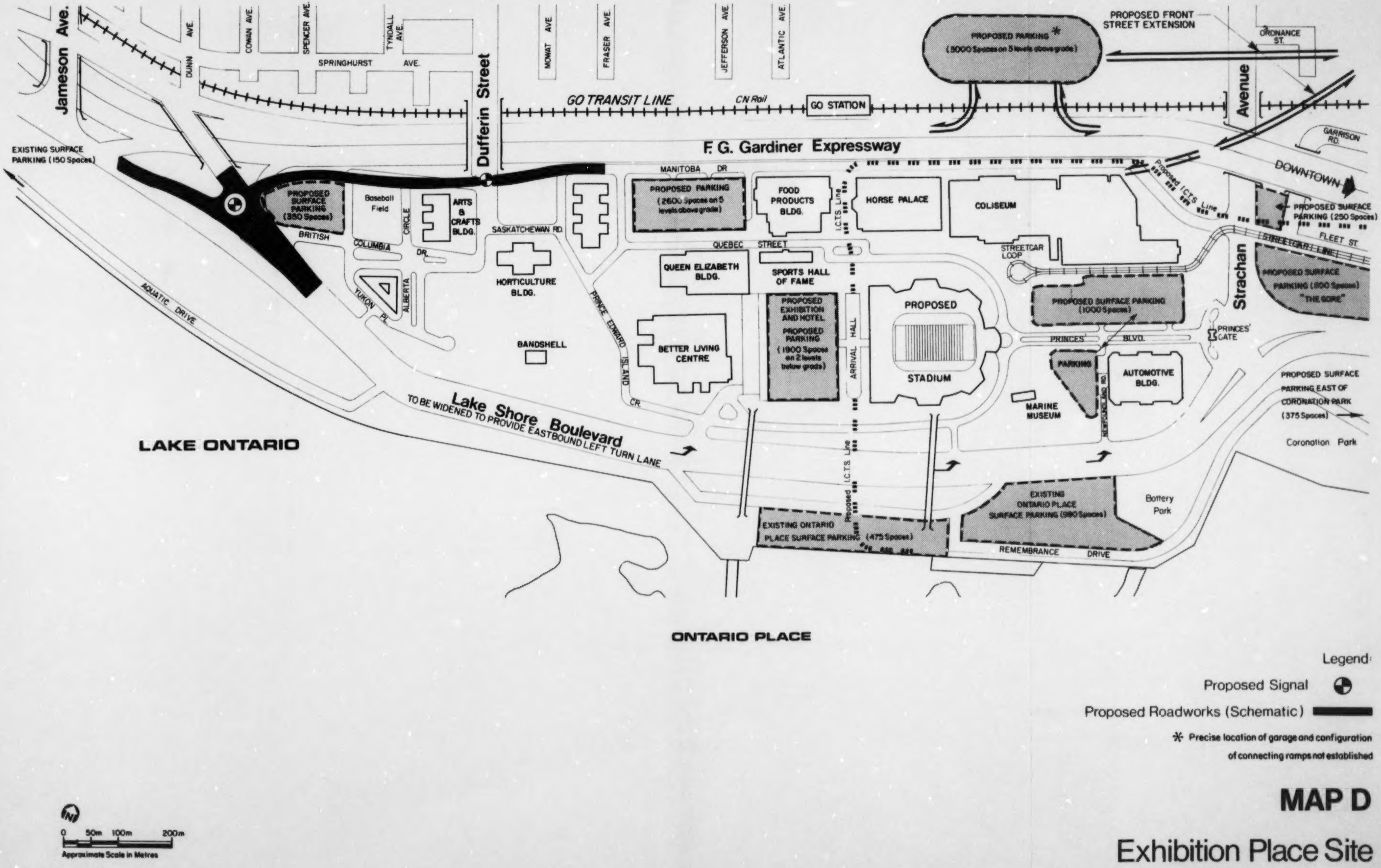
We concluded that Woodbine's comparative strengths - capacity to handle automobiles (with proper management of racetrack/ stadium event overlaps), overall cost, land size and effectiveness both short term and long term - outweigh its comparative weaknesses of distance from downtown and a low level of public transit service.

Exhibition Place

Of all the sites we analysed Exhibition Place presents us with the most wide ranging and perplexing array of strengths and weaknesses. It is the site about which people have the strongest feelings, both pro and con. Those who favour it probably do so because it has become the traditional location for sports and recreation activities in this area, because of its setting on the waterfront near the downtown area, or because of the impact a new stadium can have on the future of Exhibition Place. The enthusiasm of many Toronto politicians may well be based to a considerable extent on their fears for the future of Exhibition Place if the new stadium is built elsewhere. However, there is by no means agreement on this very sensitive issue. There are many informed and sincere people who urged on us the view that the future of Exhibition Place, particularly as a facility for trade shows, can be assured only if the stadium is built elsewhere.

We do not consider the future of Exhibition Place to be within the ambit of our mandate anymore than we consider the question of whether Downsview Airport should be maintained for the security of Canada, whether preservation of farm land is more important to this region than a stadium in Mississauga or the Province's Go East policy, to be issues with which we should concern ourselves.

In coming to our conclusions with respect to Exhibition Place as a site for the new stadium we have had to evaluate it, like all other sites, in the context of the criteria which we established.



MAP D

Exhibition Place Site

Centrality

i) As the closest site to downtown Toronto, it rates highest with those who place that priority first. On a purely geographical basis, it is somewhat less central to the market area than Downsview. However, as we have stated, there is an emotional content to centrality and it tips the scales heavily in favour of Exhibition Place.

Public Transit Access

ii) Accessibility by public transit is considered by many to be another major plus for Exhibition Place. The existing stadium has a seating capacity of about 54,000 for football and about 43,000 for baseball. Last fall, 55,000 people attended the CFL's Eastern Conference final and we were advised by Exhibition Place that as many as 30,000 came by means other than auto and the remaining 25,000 by auto. This accomplishment was due, in large measure, to the 9,000 people who used GO Trains.

The capacity of a new stadium will be about 60,000 for football games and somewhat less (depending on final design) for baseball games. But, the transporation design crowd we are using for a weekend game at a new stadium is about 50,000 people. It is generally agreed that on a regular and continuing basis public transit, including an upgraded GO Train service, cannot be counted on to carry more than 27,500 people - 10,000 by GO Train, 12,500 by TTC (streetcar and scheduled bus), and 5,000 by special or chartered buses. At this level, the service is operating close to its practical capacity and passengers will encounter delays and congestion.

We should state that the numbers used here and elsewhere in this report are our best approximations. We are aware of the fact that as many as 5% to 10% of the patrons at Exhibition Place may use 'other' means to get there. For example, some walk or cycle, some are dropped off and picked up, and some come early or stay late at Ontario Place. We believe that to some extent these 'other' considerations will impact on transportation in varying degrees at all sites, but not to an extent sufficient to alter our conclusions.

The problem for the future is that existing transit services cannot deliver many more people within one hour before game time. Yet, according to a memorandum prepared by the Planning and Development Department of the City of Toronto on November 16, 1983, with the increased seating capacity of the new stadium, transit "will have to carry a higher percentage of the total trips because of the constraints of both road capacity and off-street parking on car usage".

Experience in other cities indicates that, with a domed stadium which we recommend in Chapter 4, more out-of-town fans would attend, knowing that there is no risk of cancellation or personal discomfort due to weather. More out-of-town attendance means more cars to park.

The only conclusion we can come to is that the increase in the number of event days and the number of patrons who will use the new stadium absolutely dictate that the capacity of either or perhaps both the transit and road systems must be increased. The situation with respect to roads and parking is discussed in paragraph (iii) below. With respect to transit, we have not been made aware of any means to effectively increase the capacity of the system beyond the levels referred to above other than by 'mega projects' such as an Intermediate Capacity Transit Service (ICTS) from Union Station to Exhibition Place at a cost estimated by Metro at $223,000,000, a Light Rail Transit (LRT) line along Lakeshore Boulevard at a cost of $78,000,000, an LRT down Spadina Avenue at a cost of $56,000,000, and/or a subway relief line at a cost of over $400,000,000.

No one was able to provide us with a reliable estimate of whether or when any of these projects would be undertaken. Our own view is that questions about capital availability and planning uncertainties being what they are, it would be imprudent for us to rely on any of these improvements being completed until several years after the proposed opening of the stadium.

What is now a popular and acceptable means of getting to Exhibition Stadium - public transit - cannot be improved materially without huge costs and time delays, and may become less popular and less convenient in the context of a busier, enlarged stadium combined with a new trade centre. This is a matter of concern in and of itself, but becomes very troublesome when considered in the context of the additional strain likely to be imposed on the road and parking system and the means available to cope with those problems. Furthermore, because buses and streetcars use the increasingly congested roads, public transit service likely will decline as the volume of traffic to a new stadium increases.

One reason for the present popularity of public transit may be the aggravation so often associated with driving to Exhibition Stadium or trying to find a parking space within reasonable walking distance once you get there. The popularity of public transit may decline as a means of getting to a new stadium if major improvements are not made, and in our view, they are not likely to be made within the time required.

iii) Exhibition Place is immediately adjacent to a major expressway: the Gardiner. Unfortunately, it is not possible to take full advantage of the Gardiner's capacity to serve stadium events. The problem is related to the fact that traffic on the Gardiner from either the east or the west bound for Exhibition Place exits onto Lakeshore Boulevard. Unfortunately, Lakeshore is not capable of handling all that traffic. Due to interchange design limitations, neither the direct exit from the Gardiner's eastbound lanes into Exhibition Place nor the entrance to the Gardiner at Jameson on the western edge of Exhibition Place can be used for stadium events. As a result, arterial roads are clogged, and the available capacity of a major freeway is not used to serve stadium patrons who wish to drive to the event.

Automobile Access

In August 1983, the Province and Metropolitan Toronto made public the Exhibition Place Development Plan on the future of Exhibition Place. That Report undertaken by the Exhibition Place Technical Committee states:

> "The analysis of the transportation network and on-site parking showed that the existing access and parking facilities have generally been found adequate for smaller trade shows and sports events as well as other day to day activities which do not draw capacity crowds and do not generate intense parking conditions. However, during the large trade shows

> (such as the Home Show, and Sportmen's Show), and during the Canadian National Exhibition/Ontario Place season, the site suffers from congestion, and the surrounding roads are generally clogged with traffic. Special transit arrangements, additional parking and traffic control measures are implemented during those events in order to alleviate traffic congestion, but problems still persist. Improved transit and vehicular access to Exhibition Place is dependent on providing improvements to the transportation network external to the site and in particular to the facilities in the Central Waterfront area".

Based on a weekend design crowd of 50,000, estimates are that about 27,500 will use public transit. Accordingly, we estimate that approximately 22,500 fans will use automobiles and, based on an average occupancy of around three passengers per auto, 7,800 parking spaces will be required for stadium patrons alone. There will, of course, be other demands for parking spaces at Exhibition Place for other attractions such as Ontario Place, the new trade centre, other facilities, and Exhibition Place staff. While these will vary, for design purposes we have estimated that about 4,900 spaces should be assigned to non-stadium uses. Accordingly, it is agreed by the proponents of Exhibition Place and by our consultants that there is a clear need for a minimum of 12,700 parking spaces inside Exhibition Place or within reasonable walking distance of the stadium.

The sponsors of Exhibition Place have produced a number of modifications to the Exhibition Place Report referred to above. Their latest complete proposal envisages that 12,700 parking spaces can be supplied as follows:

Surface:	
Inside Exhibition Place	
- near Princes Gate	1,000
- at west end of grounds	350
	1,350
Outside Exhibition Place	
- Ontario Place	1,455
- The Gore	800
- north of the Gore	250
- south-east of the Gore	375
- west of Exhibition Place	150
- north of the Gardiner (Parkdale)	820
	3,850
Structures:	
Inside Exhibition Place	
- parking garage under new trade centre	1,900
- new parking garage on Manitoba Drive	2,600
	4,500
Outside Exhibition Place	
- new parking garage north of the Gardiner Expressway	3,000
Total	12,700

At the present time there are 5,850 surface parking spaces inside Exhibition Place and 4,050 surface parking spaces outside the grounds for a total of 9,900 spaces. The Exhibition Place proposal contemplates the loss of 4,500 surface spaces inside the grounds to be replaced by 4,500 spaces in parking garages for no net gain and a loss of 200 surface spaces outside the grounds combined with the addition of a 3,000 car parking garage for a net gain of 2,800 spaces.

It should be noted that this demand for about 12,700 parking spaces does not cater to the problems that exist during the three weeks of the CNE or if stadium events conflict with other major events at Exhibition Place such as The Royal Winter Fair or the Home Show.

The construction cost of the new parking garages is estimated to be about $47,000,000 (in excess of the cost of equivalent surface spaces) with the trade centre garage costing about $19,000,000, the Manitoba Drive garage about $13,000,000, and the garage north of the Gardiner about $15,000,000 (excluding land costs). Some would argue that the entire cost should be attributed to the new stadium and others might say none. Since the stadium requires about 7,800 out of the total of 12,700 spaces, we believe it is reasonable to allocate 61% of the cost or about $29,000,000 as a cost attributable to the new stadium.

This amount will barely enable Exhibition Place to provide the level of parking for a new stadium that is now provided for the existing stadium. Furthermore, the advice we have received indicates that space in parking garages is generally less convenient to use than surface facilities and one should expect that the time required to empty these garages will frustrate many of the drivers who have to use them.

There is another important question mark concerning the 3,000 car garage north of the Gardiner Expressway. Neither the Exhibition Place representatives nor our own consultants have been able to assure us that this garage can be connected directly to the Gardiner Expressway. This hook-up is essential since the garage basically is designed to accommodate Exhibition Place traffic using the Gardiner. This would enable the available capacity of the Gardiner Expressway to be utilized and would take this traffic off clogged arterial roads. If this garage cannot be accessed directly from the Gardiner, its usefulness is limited significantly.

Regrettably, parking is not the only problem confronting automobile passengers. The arterial roads currently are by no means adequate. It has been acknowledged that Lakeshore Boulevard must be widened, Dufferin Street extended, Manitoba Drive improved, traffic signals added and a Dufferin Street bus loop installed, at a total cost of about $9,000,000. Once again, we think 61% of this cost or $5,500,000 should be allocated to the stadium.

These improvements will certainly help but, in our view, they will not significantly reduce the level of congestion. The advice we have received is that the key to vehicular traffic in the area is to provide access to the parking facilities from the Gardiner Expressway and Front Street. Assuming this can be done, the cost of extending Front Street west to

Exhibition Place is estimated at $55,000,000 and of providing interchanges between the Gardiner Expressway and facilities at Exhibition Place at about $10,000,000 (see footnotes to table below). Estimated costs of the road and parking improvements may be summarized as follows:

Road and Parking System Improvement	Total Estimated Capital Cost ($ million)	Allocation of Cost to Stadium (1) ($ million)
ROADS		
- Minor improvements (Lakeshore widening, Dufferin extension)	9.0	5.5
- Front Street Extension	5.5 (2)	3.4
- Interchanges and Connections (Gardiner/Front/North Garage)	10.0 (3)	6.1
PARKING		
- Manitoba Drive Garage (2,600 stalls)	13.0	7.9
- Trade Centre Garage (1,900 stalls)	19.0	11.6
- North-of-Gardiner Garage, excluding land costs (3,000 stalls)	15.0	9.2
TOTALS	71.5	43.7

(1) As explained in the text, we have allocated 61% of the total estimated cost attributable to Exhibition Place to the stadium.

(2) Of the total estimated cost of $55,000,000 we have allocated only 10% to Exhibition Place based on the usage assumed by the proponents.

(3) Since there are no detailed plans available, the estimate of $10,000,000 is provided by our consultants as an approximate cost to upgrade the planned interchange to be capable of serving all directions and the north-of-Gardiner garage.

Difficult as it may be to estimate and attribute the above costs, it is even more difficult to know whether and when some of the most important improvements will be completed. The earliest timing we have heard is in the early 1990's and we are inclined to believe that this is optimistic. Assuming these costs are incurred and that improvements are completed on a timely basis, the capacity of the roads and parking system serving the new stadium will be about the same as that which now serves the existing stadium.

Impact

iv) Exhibition Place, including a 54,000 seat sports stadium, is now and for many years has been a fact of life for Parkdale and the waterfront area. The new stadium will be a larger structure but it seems to us that, both in terms of aesthetics and events, the additional impact on the general environment should not be unreasonable.

However, its impact on the Exhibition Place grounds themselves and on the other users of the grounds and buildings is another matter. Some people, including our planning consultant, believe that a 200 foot high stadium with a 'footprint' of 10 to 12 acres will simply overpower the rest of Exhibition Place. If a 600,000 square foot exhibition hall is added, the impact is compounded. Furthermore, while the present stadium at Exhibition Place is used only 130 days per year a new domed stadium would, it is hoped, be occupied well over 200 days each year, thereby increasing the problems associated with the shortage of space for parking and other purposes related to Ontario Place, the CNE and trade shows. This situation will be particularly bad during the 4 to 8 year period required to construct the new stadium and exhibition hall.

The proposers of Exhibition Place argue that the Exhibition Place grounds can accommodate both the new stadium and the new Exhibition Hall as planned and shown earlier in Map D, and that the resulting synergistic effect will be very beneficial. They argue that Exhibition Place can thrive as a combined sports/trade/recreation complex. As stated, this is not an issue with which we feel competent or compelled to deal. In passing, we would express the opinion we have come to, namely, that Exhibition Place might function more effectively if it were dedicated exclusively either as a sports/recreation complex or as a trade complex.

v) Two reassuring aspects of Exhibition Place are its public ownership and its immediate availability. We believe that the approvals required to enable

Availability

construction to commence could be obtained quickly and without a great deal of opposition.

However, the ownership of Exhibition Place and the complex nature of its operations and activities do present one interesting problem. We assume that the largest financial contributor to the new stadium, including infrastructure, will be the Province of Ontario. In Chapter 6 we recommend that the stadium be owned by a Crown Corporation in which the Province of Ontario will have a pre-eminent position. The stadium corporation, through its directors and management, would be responsible for and have authority over the new stadium from design through construction and operation. This would normally (as in the case of Downsview or Woodbine) involve ownership of the land and building, and control of the important revenue sources such as parking. How this would be accomplished in the context of the present Metropolitan Toronto ownership and management of Exhibition Place is a question we have not attempted to answer definitively. We believe it will require careful attention if the stadium is built at Exhibition Place.

Marketing

vi) In our opinion, Exhibition Place has strong public acceptance and, assuming a reasonable level of transportation services, would be the most easily marketable of the preferred sites. The opportunity of a new stadium at this location to interact with other activities in the immediate area, and the amenities and other tourist attractions in the downtown area are very impressive. Another clear marketing advantage enjoyed by a stadium at Exhibition Place is that it would not have to compete with itself, as Downsview and Woodbine would have to compete with Exhibition Place. The other side of this coin is that there will be an inevitable and perhaps increasing conflict between Stadium events, trade shows and Ontario Place - to say nothing of the three weeks of the CNE.

Flexibility For Ancillary Uses

vii) The Exhibition Place grounds are barely able to accommodate a new stadium, a new trade centre and other existing uses including parking. There is little or no prospect that land will be available for other ancillary uses.

Future Access Capability and Cost

viii) At a minimum, Exhibition Place will require at least as much money to be spent on infrastructure as any of the other preferred sites. Of equal concern is that some of these improvements (especially the Front Street extension and the new Gardiner interchanges) may not be built within a reasonable time. In addition, the massive projects needed to bring public transit and automobile access to an acceptable level for the long term will cost hundreds of millions of dollars and may or may not even happen.

3.3 Other Sites

In addition to Downsview, Woodbine and Exhibition Place we considered 31 other sites. A complete list of the locations and their proposers can be found in Appendix II and were shown earlier on Map A. Most sites were proposed to us formally, some quite informally and a few, like Downsview and the railway lands adjacent to Front Street, we investigated on our own initiative. Some are urban, others are suburban and some distinctly ex-urban or 'greenfield'. Some are privately owned while others are owned or supported by municipalities and their senior elected officials.

We received excellent co-operation and great enthusiasm from all interested parties in support of these locations. In some cases, we received sophisticated briefs complemented by articulate discussions and in other cases we received straightforward suggestions from interested citizens in letter form.

Each site was reviewed by us and was analyzed in due and appropriate detail by our technical consultants. For instance, Appendix III provides a summary of findings of an independent transportation analysis of many proposed locations. In order to conserve space in this report, we have not described the remaining 31 sites in the same detail as the three preferred sites. Rather, we have focussed here on their key strengths and weaknesses and have indicated the basic reasons why each of these other locations did not, in our view, rank as high as the three preferred sites.

3.3.1 Other Prominent Sites

In our view, the following four sites also merit special reference in this report. We have not attempted to rank them in order of preference.

Highway 10 and 401 - Trillium Dome Corporation

This site was proposed by a consortium of landowners led by The Shipp Corporation in collaboration with the City of Mississauga. This was the most imaginative and comprehensive proposal received by the Committee and it was supported by numerous public and private figures and authorities.

The essence of the proposal (see Appendix VI) is that about 2,000 acres of raw land lying north of Highway 401 and west of Highway 10 be purchased (with funds provided directly or indirectly with provincial support) by the Trillium Dome Corporation (specifically incorporated for the purpose) for $30,000 per acre. The selling landowners would also own the shares of that Corporation. The Corporation, backed by the credit of the Province of Ontario, would borrow additional funds (estimated at $150,000,000) to build a new stadium on a 300 acre site approximately at the north west junction of Highways 401 and 410. In time (estimated at 20 years), the balance of the land owned by the Corporation (about 1,800 acres) would be developed and sold with the anticipated proceeds providing more than enough funds to retire all debt, relieve the Province of any further financial responsibility and, ultimately, leave the stadium owned and operated free and clear by the private sector.

The proponents of this site provided us with comprehensive briefs not only on financing but also on transportation, marketing and other issues. The strengths of the site are its good accessibility for automobiles, its relative centrality to the market area, its lack of any negative impact on the immediate neighbourhood or the general environment, its immediate availability, the prospect for ultimate private funding and ownership, its ability to work well from opening day onward, an acceptable level of expenditures for infrastructure improvements, and sufficient land for total flexibility for ancillary uses.

Its principal weakness is its relative inaccessibility by public transit. In this regard, it certainly does not compare to Downsview or Exhibition Place and offers less convenient transit service than Woodbine while being further from downtown Toronto than Woodbine. Its remoteness from downtown Toronto would make it more difficult to market generally. Another serious problem is presented by the financial plan. While it does offer the prospect, ultimately, of funding the stadium entirely from private sources, it is a massive development plan and as such represents a significant risk if, notwithstanding the best judgment and efforts of its proponents and developers, sufficient funds are not generated. Real estate developments of this type are complex and risky. In our view, the risks of the financial plan outweigh its opportunities.

After due consideration we concluded that, notwithstanding its merits and the persuasive arguments of its proponents, on balance it ranked with several other sites behind Downsview, Woodbine and Exhibition Place.

Railway Lands (Downtown Toronto)

As our work progressed, increasingly we became intrigued by the idea of a site within walking distance of the amenities of downtown Toronto, well served by public transportation yet accessible by automobile and with adequate parking available. After visiting Vancouver and Seattle, we realized that, just as underutilized railway lands in Vancouver and Seattle had become the sites for B.C. Place and the Kingdome respectively, perhaps there was an opportunity to build our new stadium somewhere on the lands owned by CN/CP railways west of University Avenue on the edge of Toronto's downtown core. On our own initiative, we pursued this idea and concluded that, as shown in Appendix II, there were several potential stadium sites within this area, one or more lying south of Front Street and another on the north side of Front Street.

Our investigations revealed that there were several problems associated with the lands south of Front Street. The most serious consequence of these problems would be their impact on the time when construction of a new stadium could start. The development of the railway lands by their owners has been actively pursued for more than a decade and, although the latest plan has received some official approvals, no one could tell us when an overall development plan would be finally approved and set in motion. Furthermore, the introduction of such a large project into the current plans could delay final approval and jeopardize the whole plan. Such important considerations as the location and availability of parks, roads linking Front Street with the Lakeshore, the roundhouse, and the pumping station could take an interminable time to solve. In addition to these matters, the timing of the removal of most of the track and the flexibility to relocate some of those tracks create even more problems. Furthermore, it appeared to our consultants that there might not be available within this area a parcel of land large enough to accommodate the new stadium and its necessarily related facilities. Accordingly, but reluctantly, we ruled out this site.

We were unable to recommend the railway lands lying between Front and King Streets and between Simcoe Street and Spadina Avenue because of the likely difficulty in assembling the site (which is owned in the main by the Railways but by many other private parties as well), the cost of the land, the potential rezoning problems, the induced congestion, the immediate impact of such a large structure on this district and the potential that the stadium could be crowded out over the years.

Unless circumstances change quickly and dramatically, we do not think it practical to rank these sites any higher. It is conceivable, however that the owners of these lands, alone or in conjunction with others, could come forward with a workable proposal.

Six Points (Etobicoke)

We investigated this site in the City of Etobicoke (but owned by Metro) on our own initiative on the recommendation of our Planning consultant. As shown in Appendix II, it is within two kilometres of Queen Elizabeth Way which lies to the south and Highway 27 which lies to the west. There is a good network of arterial roads to connect the site to these expressways. The site offers excellent rapid transit opportunities in the form of the Bloor Subway and GO Rail and is a focal point for surface transit routes. It is central to the market area although it is removed from Downtown Toronto both in terms of distance and perception.

The principal problem with this site is that it may not be able to accommodate a new stadium because of its small size and irregular shape. Six Points is the 'downtown' of Etobicoke and a stadium at this location may not be compatible with Etobicoke's plans for the immediate area. Certainly, a structure of the size contemplated would have a serious impact on both adjoining users and the general environment of the residential neighbours. Another problem that we saw involved the need to widen some of the arterial roads, particularly Burnhamthorpe and Kipling. It may be difficult if not impossible to acquire the necessary rights of way. As well, the rebuilding of the Six Points interchange would have to be proceeded with immediately.

The potential supply of surface parking spaces is inadequate and would have to be supplemented by a parking garage, with its attendant problems.

After weighing the pluses and minuses, we found the site fairly intriguing 'on paper'. However, none of us 'could see it' as the location of the new facility. The stadium just does not seem to fit at Six Points notwithstanding some of the transportation merits of the site.

Varsity Stadium (Mid-town Toronto)

Varsity Stadium has been an important sports and entertainment facility for the Metropolitan Toronto area for many years. The proposers of this site envisaged a 16 acre parcel centred on the present location of Varsity stadium (see Appendix II).

Almost all the buildings within the area shown would be demolished and replaced with a new stadium and a mixed-used commercial development in the Bloor/St. George area consisting of two office towers, two hotels, street level retail stores and a parking garage. Like the Trillium Dome proposers, these proposers envisage revenues from the development ultimately providing the funds for the entire development, including the stadium.

The principal strengths of this proposal are its location in relation to downtown Toronto and its superb accessibility by rapid transit located as it is virtually at the junction of all three subway lines. Its proposers and others would argue that the prospect for ultimate 100% private sector funding is also a major plus. We consider that the risks of this specific proposal outweigh the potential advantages of such a plan.

On the other side of the transportation ledger, the site is almost inaccessible by automobile. There is no expressway nearby, the arterial roads are already clogged and parking is inadequate even for the current volume of traffic. Moreover, the impact on immediately adjoining uses and on the general environment would, in our view, be well above any reasonably acceptable level. Furthermore, its availability is highly questionable and our enquiries have led us to not be encouraged. Even if the University of Toronto which owns the site were prepared to agree to the plan, one condition would be that the stadium's facilities would undoubtedly have to be made available for the University of Toronto's programmes - presumably at a reduced cost or at no cost.

Although we were intrigued by this creative proposal at first, after further consideration we concluded it did not have the potential to rank as a preferred site.

(As this report went to press, we were advised that the University's Governing Council has declined formally to make the site available).

3.3.2 Other Officially Proposed Sites

Ten other sites deserve to be mentioned. Three are suburban and seven are more distant from the current market concentrations.

York-Hannover (Near Lester B. Pearson International Airport)

This suburban site is located on a large parcel of land, partly in Etobicoke, but mostly in Mississauga, immediately to the west of the 'V' shaped junction of Highway 401 and Eglinton Avenue. It is owned by York Hannover Developments Limited who made the proposal to us. In its submission, York Hannover urged us to consider the unique location of this site in relation to two major existing expressways, Highways 401 and 427, and a network of arterial roads. Its centrality to the market place was also highlighted. However, we were advised that this site was probably too close to the expressways and, consequently, it would be difficult if not impossible to provide good access between the site and the expressways. We could only consider this site seriously if it offered the prospect of outstanding accessibility for automobiles since it is not served by rapid transit and, in our opinion, the prospects for such service in the foreseeable future are not good. We also believe that a stadium on this site could impact the general environment of the neighbouring residential areas to an unreasonable extent and would be opposed vigorously.

Our conclusion was that Woodbine was a more preferable suburban site.

York University (North-west North York)

Another suburban site is a 30 acre parcel on the south side of Steeles Avenue owned by York University and located in the northwest corner of its campus. Senior officers of the University together with representatives of its Board of Governors submitted an interesting brief and met with us. The site is reasonably located with respect to the market area. It is well located with respect to Highway 400. It cannot be reached directly by rapid transit, but the university students are reasonably well served by regular buses which connect to the subway system.

As we saw it, this site was in almost all respects about 'average'. It would only work fairly well for automobiles as is and its prospects in this regard would not improve unless and until Highway 407 was completed in this area. Moreover, there appears to be inadequate land available for surface parking within a reasonable walking distance from the Stadium. Public transportation may work for the University's purposes, but it would be less than adequate for patrons of a large facility of this type which could be utilized more than 200 days per year. We see no prospect for extension of rapid transit to the site within the foreseeable future.

Perhaps the major problem with this site is the fact that a fundamental aspect of the University's proposal was the availability of the new stadium for the University's purposes. In our view the economics of the situation make its use by the University extremely unattractive financially either for the University (if it has to pay rent) or for the stadium corporation (if it cannot charge York University rent). We cannot recommend a site which brings with it a significant uneconomic use.

Richmond Hill (Highway 7 and Yonge Street)

The third suburban site is located in the Town of Richmond Hill and was actively supported by the Municipality. This site consisted of a 500 acre parcel known as the 'Langstaff Farm' or 'Jail Farm' and is owned by the City of Toronto. The same site was also proposed by A.N. Chapman Ltd. and the Regional Municipality of York.

The site is only three to four miles from the north end of the Yonge Street subway, it is near Highway 404 and can be reached from Highway 400, and two major arterial roads, Yonge Street and Highway 7, pass right by it. If we could have predicted when Highway 407 would be completed and/or the Yonge Street subway extended, we may have rated the Richmond Hill site higher. However, in the circumstances, we concluded that other suburban sites were more preferable.

Seven other sites were located further from the major market concentrations. They are listed from west to east, in the following locations (shown in more detail in Appendix II):

Oakville/Halton - One site of 170 acres in Oakville was proposed by the Hon. James Snow in his private capacity and the same site also was proposed by the Regional Municipality of Halton. It is at the south-west corner of the intersection of Highways 403 and 407.

Highways 404 and 407 - This 300 acre site, comprised of 200 useable acres in 3 parcels, lies east of Highway 404 on Woodbine Avenue just south of the proposed Highway 407. It is owned and was proposed by The Miller Group.

Markham - The Town of Markham proposed a site of about 3,000 acres of land owned mostly by the Province of Ontario in the vicinity of the proposed Highway 407 and the Markham/Pickering Town line. The Town submitted this proposal to us backed by the Regional Municipality of York.

Durham - The Regional Municipality of Durham proposed four sites within the Regional Municipality, two of which were also sponsored by local municipalities. All of these sites are discussed separately below.

Whitby - The Town of Whitby proposed one of these sites on lands adjacent to Iroquois Park, to include a 320 acre parcel of land bounded on the south by the Ontario Hospital, the north by Highway 401, the west by the Lynde Shores Conservation area and the east by Gordon Street. It is owned partly by the Province of Ontario and partly by private interests.

Oshawa - The City of Oshawa proposed a 108 acre site located immediately south of Phillip Murray Avenue, between Stevenson Road South and the Oshawa/Whitby boundary, owned by the City and the Central Lake Ontario Conservation Authority.

The third site proposed by Durham was a large parcel at the southeast corner of Regional Road 23 and Highway 401 owned mostly by the Province with some privately held.

The fourth Durham site proposed is on Whites Road south of Regional Road 4 near the future development of Seaton. The Province owns all the land for this site.

While each of these sites had its own special qualities we believe it is possible and fair to generalize both their strengths and their weaknesses. In every case there is a large block of land which could accommodate the stadium, surface parking, all ancillary uses and internal infrastructure. Each had the potential to be well located with respect to one or more major expressways. However, none of them is well situated in terms of the market area and none of them is served by an adequate level of public transportation.

In our view, the key word to apply to all of these sites is 'future'. It did not seem to us that they were well located for a stadium which we would expect to be in service within the next four years. We suspect, however, that when the next generation of stadiums for this area emerges, many of these sites will be prime candidates.

We also received a variety of further suggestions for sites within and outside Metropolitan Toronto, including even a floating stadium on Lake Ontario. Each of these sites also was shown earlier on Map A and they are listed in Appendix II. All these proposed sites were analyzed and found to be inappropriate or impractical, usually because of problems with their availability, accessibility or impact on surrounding neighbourhoods.

4. DESIGN AND USE

Stadium design is a well developed architectural, engineering and operating area of expertise and there are several acceptable stadium designs which are in use and work well. Nonetheless, it is critical that the architects and engineers designing the stadium concern themselves with cost, as well as the requirements of tenants, patrons and operators. In our view, the stadium should be aesthetically pleasing and symbolically inspiring as an enduring public building. According to the majority of our proposers and stadium experts that appeared before us, it should be built to seat between 60,000 and 65,000 spectators to accommodate present as well as anticipated uses.

4.1 Design

Its design and use of materials should pay particular attention to acoustics, lighting, ventilation, concessions, washrooms, facilities for the handicapped, private boxes and other special services. The design also must be flexible enough to provide 'major league' seating configurations of about 45,000 seats between the foul poles for professional baseball and about 35,000 between the goal lines for football and soccer. In addition, it should be able to handle concerts, religious and other rallies, trade shows, special events, and other uses likely to be attended by large numbers of people. We think it makes sense as well that the smaller crowds for sporting events such as professional basketball and tennis be capable of being accommodated, although such a stadium is unlikely to be a permanent home for either. We believe it is not practical to design a stadium to accommodate hockey.

4.2 Roof

Our mandate directed us to consider whether the new stadium should be covered and if so, in what manner. Other than site, this was the topic that created the most interest.

The arguments for a permanently covered stadium include the potential to use such a large capital investment every day of the year, the ability to schedule events without fear of cancellation, the flexibility to accommodate a wide range of events, the prospect of increased attendance in poor weather and the general comfort of the patrons.

The principal argument against a permanent roof is the loss of the pleasures involved in watching baseball or football outdoors on a beautiful summer afternoon or evening. Other aspects such as the size and appearance of a domed stadium, the technical problems associated with an enclosed structure (noise, air quality, lighting, athlete sight lines) and increased capital cost also are used as arguments by those who would oppose a permanently covered stadium.

Notwithstanding these arguments, if a new stadium is to be built, our recommendation is that it be covered. Having said that, we believe it is now possible to meet most of the objections of those who argue against a covered stadium. The answer to their objections is to be found in a retractable roof which, when retracted, would open the stadium for most spectators. The 'feeling', essentially, would be that of an uncovered stadium.

We and our technical consultants reviewed several proposals by well respected engineering and architectural firms and are persuaded that it is feasible and practical to install such a retractable roof. Excerpts from the submissions showing conceptual drawings and engineering concepts of many of these proposals are displayed in Appendix V. Many of these proposals utilize proven technology and should require little additional research to demonstrate their feasibility. Others are more futuristic and would require a great deal of research and testing - such as the 'Air Roof' proposal.

We do not have the necessary engineering expertise to select a specific proposal at this time. However, we are sufficiently confident that a retractable roof which enables the stadium to become virtually an outdoor stadium (because of a large unobstructed opening) is feasible, and we recommend strongly that specifications for a new stadium include it.

The opportunity exists for Ontario enterprises to design and develop the first retractable stadium roof in the world. Needless to say, significant risks would accompany such a venture. Accordingly a careful analysis of all technical considerations by appropriate experts must be undertaken and the conclusions certified. This review should be done as other planning and design work proceeds.

4.3 Amateur Sport

Many briefs and our own investigations addressed the issue of incorporating provisions for amateur sports in the design and use of the stadium. For instance, the Olympics and other world-class sporting events have particular requirements for standard track layouts and even exposure to the elements. If it proves practical, our view is that the stadium should be designed to accommodate the standards of these special sporting events including the Olympics, Pan-American and Commonwealth Games.

However, there appears to be a general consensus - with which we agree - that amateur athletes will not be major users of a large new stadium. The reason is purely and simply economics. The stadium corporation will find it difficult enough to make ends meet assuming it is able to charge the going rate for every available hour. There is no amateur athletic organization in Canada of which we are aware that will be able to pay the going rate and the stadium corporation will not be in a position, except on an occasional basis, to subsidize amateur athletics.

We do recommend, though, that if government is prepared to spend large sums on a new stadium for this area, serious consideration should be given to the dedication of funds by government and the private sector on a continuous basis for the support and development of amateur athletics programs. We heard several proposals as to the manner in which amateur organizations could utilize such funds, including the use of some monies to enable these organizations, on some basis, to utilize the stadium or related facilities. As noted earlier, the capacity to include a variety of ancillary facilities at the Downsview and Woodbine sites is consistent with these goals.

5. CAPITAL FINANCING

The key conclusion of our analysis of capital financing was that significant government involvement in financing the capital cost of the stadium will be an absolute necessity. The stadium authority will be unable, on its own, to borrow the money for stadium construction or to pay back borrowed money with interest in future years. Any financial proposal which contemplates repayment of principal and interest will result in operating and cash deficits that will necessitate annual government grants to keep the stadium functioning.

If there is to be a stadium, it will have to be paid for by government capital grants supplemented by private capital investment if that can be achieved on a basis that is advantageous to the stadium authority and attractive to private investors. This possibility is addressed in Section 5.4.

5.1 Capital Costs

Based on our review of recent experience elsewhere and of the various proposals presented to us, if a new 60,000 seat stadium with a fully retractable roof were to be built, it likely would cost about $150,000,000, in 1984 prices, not including land, site preparation (demolition, etc.), servicing (water and sewage), surface or structure parking, internal traffic circulation infrastructure or additional construction costs such as furnishings and facilities for private boxes and concessions. In the case of the Downsview site, these requirements could add up to $50,000,000.

We cannot overemphasize the need to take all steps necessary to ensure that the facility is built on time and on budget. While horror stories about time and cost over-runs are well known, the recent experiences in Vancouver, Minneapolis and Syracuse provide ample evidence that, with proper management and controls, this facility can be built to budget. We were fortunate to receive briefs from and to hear several highly regarded Canadian firms involved in the design and construction of large projects. They expressed a sensitivity to these issues and demonstrated that the know how and determination to avoid a financial disaster are right at hand.

In addition, we are advised that operating revenues are unlikely to provide the funds that will be required for major maintenance and replacement expenditures over the years. Accordingly, additional government funds may be required for this purpose.

5.2 Sources of Financing

There is no question in our mind that this stadium cannot be built without substantial support from one or more levels of government. Even the most optimistic operating assumptions cannot conceivably provide the funds required to service principal and interest on debt, let alone provide a market rate of return on invested equity. We hasten to add that the tenants of the stadium, in particular the professional sports franchises, are in no position to pay more than a fair rental based on operating costs of the stadium and the market, notwithstanding some of the public's perception to the contrary. It seems to us that, having regard to the costs involved, it may be necessary and desirable for all three levels of government to become participants. Furthermore, we believe that economic and other benefits will accrue to all three levels from the construction of a new stadium.

5.3 Mechanics

There are numerous mechanisms by which governments in Canada and the United States have financed their involvement in stadium construction, varying from the use of general revenues (such as by the British Columbia government) to specific approaches such as revenue bonds and local tax levies in the United States. We are not in a position to comment specifically on the appropriate form of government financial involvement but expect that it could include a variety of forms including guarantees, donation of land, lottery proceeds, tax concessions and general revenues. We reviewed several interesting possibilities for the use of lotteries as a source of funds for a new stadium and we recommend particularly that such a source be further explored.

We examined one financing mechanism commonly used in the United States to finance stadia, namely, municipal bonds supported by local business tax levies. Unlike in Canada, interest on municipal bonds is received tax-free in the United States. Therefore, under current legislation, higher business tax levies would be required in order to cover the higher interest cost.

The appropriate cost sharing between the levels of government is best left for detailed discussion by government officials. However, in our deliberations we have assumed that the Province, by virtue of direct financial support of the stadium itself and participation in building the inevitable transportation infrastructure, will have a higher level of financial commitment (when direct and indirect expenditures are combined) than either the municipal or federal governments.

5.4 Private Sector

We believe that up to 25%, that is, up to $35,000,000 to $50,000,000, of stadium construction costs may be available from private sector contributions and investments, and we believe that this represents an important role for the private sector. Many innovative suggestions have been made for private sector involvement in capital financing. In evaluating them, we could not determine the extent and feasibility of each proposal because that cannot be done until actual negotiations are undertaken and firm commitments are sought - something not in the realm of this committee's mandate.

Each proposal (the general details of which are outlined in Appendix VI) involves some degree of converting future operating revenues into capital investment at the time of construction. For instance, the early sale of concession rights, private boxes, preferred seating rights, advertising rights and parking rights could realize cash to be used for construction but would restrict future operating revenues which will be needed to cover ongoing operating and maintenance expenses.

Some proposals called for private sector ownership based initially on borrowed funds supported by government guarantees, but ultimately on the future development and appreciation of lands adjoining the stadium. In these cases, government might ultimately be relieved of any financial involvement but is at total risk for some considerable time.

Several of the private sector proposals make use of current tax legislation to reduce or defer taxes otherwise payable in order to raise the effective rate of return on the investment. While this approach involves indirect government participation in the form of foregone or deferred tax revenues, it does involve the private sector assuming some portion of the risk connected with a public project of this kind.

In our opinion, private sector involvement will likely include some combination of the above approaches which will require detailed negotiations. We recommend that the provincial government take the lead in contributing capital financing but that it seek to involve the private sector in the construction and management of the stadium. This is subject to our recommendation that extreme care be taken not to dispose of future sources of revenue for a long term as a cost of obtaining private sector involvement.

Our position is that the ongoing operation and maintenance of the stadium is a long term commitment for which operating revenues will be required to reduce the prospect that governments will be called upon after construction is completed. In our view, if there is no other alternative, it is best for the government to finance the initial capital cost, leaving as much as possible of future revenues available to meet operating costs rather than sell revenue sources in return for private sector contribution.

Further study will be required with respect to the implications of including a private financing component. Nonetheless, we are hopeful that every effort will be made to find a way to include the private sector in the initial capital investment and subsequent operations of the stadium.

Participation by all levels of government and the private sector in order to finance construction is beneficial in terms of spreading the cost and in linking the costs to those that benefit. In our opinion these benefits outweigh the potential problems caused by having a variety of owners with differing interests and views.

6. OWNERSHIP, MANAGEMENT AND OPERATION

It is clear that the long term success of a new facility will depend on the close co-ordination of the owners, managers and users in order to take full advantage of the benefits to the investors, franchise holders, spectators, and the general public while at the same time minimizing the costs to the taxpayers.

Our visits to other stadia clearly indicated, as well, that quality management is a key ingredient.

6.1 Ownership

Assuming that the municipal, provincial and federal governments as well as the private sector are involved in funding the capital cost of the new stadium, its ownership becomes quite complicated. We believe that the governments' involvement should be through a provincial crown corporation in which the Province of Ontario has the controlling voice. We envisage the chief executive officer of that Corporation reporting to a specified Minister of the Government of Ontario and that the Board of Directors would include appointees of all levels of government. But, once again we see the Province as being in a pre-eminent position. More thought will be required to determine the structure that can best accommodate government interests and the private sector once the details of their involvement are ascertained.

6.2 Management

We were introduced to a wide variety of management arrangements ranging from municipal, provincial or state employees, to hired management consultants and management by private operators. We believe that the construction and continuing operation can be managed by a permanent full time management team employed by the crown corporation suggested above. The staffing of the management team is key to the overall success. The individuals must be experienced and have proven capability in their fields, and must be paid accordingly.

We believe that the continuity offered by one management team with the responsibility, authority and capability to carry out all phases of design, construction and operation is the way to proceed. This approach does not rule out the option of involving the most appropriately talented people at each stage through change-over and expansion of the staff.

We noted earlier the high priority we place on having the project completed on time and within budget. We received several submissions on how this can be accomplished through various approaches to project management. The success of these approaches elsewhere indicates that they deserve serious consideration here.

6.3 Operations

We believe that a new stadium's annual operation must be financially self-sufficient (assuming no debt-servicing costs or depreciation charges), and that this is entirely feasible based on various revenue and expense projections which we have reviewed.

Experience elsewhere indicates that when a facility is properly planned and operated with a long-term marketing plan, a viable financial operation can be achieved. The key to this goal is to maintain a strong marketing outlook during all phases of stadium development. Indeed, this concern has played an important role in our deliberations over the sites. The detailed design of the stadium should pay particular attention to the ability to attract spectators through good sight lines, comfortable seating, ease of getting in and out of the stadium, ease of access to concessions and good parking arrangements. The attention that is paid to these details will have a major impact on the long-term financial performance of the stadium and of the franchisees.

There are a wide variety of sources of revenue for the stadium operator as well as for the franchisees and just as many options as to how each should be split. The experience elsewhere and the proposals presented to us vary significantly on which sources will be relied upon for revenue, as is shown in Appendix VI. Generally, the chief sources of revenue are stadium rentals, food concessions, in-stadium advertising, ticket surcharges, private box rentals and parking receipts. On the expense side, salaries, wages and utilities will be the largest cost items and this should be taken into account in the design of the stadium and its equipment.

6.4 Community Co-operation

The need for co-operation clearly extends beyond the stadium operator's and users' relationships and beyond the stadium's physical limits. Wherever the stadium is located, it will 'work' much better if various authorities - police, transit authorities, municipalities, major tenants and others co-operate and coordinate their efforts in the interest of the community, the spectators, the stadium corporation and other affected citizens to manage traffic flows, scheduling and promotional efforts.

THE STADIUM STUDY COMMITTEE REPORT

APPENDICES

TO THE
HONOURABLE WILLIAM G. DAVIS
PREMIER OF ONTARIO

February 1984

FEB 6 1984
METROPOLITAN
TORONTO
CENTRAL
LIBRARY
Municipal Reference

HUGH L. MACAULAY, *Chairman*
WILLIAM B. BREMNER, *Member*
LIONEL H. SCHIPPER, Q.C., *Member*
RAYMOND L. MCNEIL, *Secretary*

STADIUM STUDY COMMITTEE REPORT

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STADIUM STUDY COMMITTEE REPORT

APPENDIX I

ACTIVITIES OF THE STADIUM STUDY COMMITTEE

STADIUM STUDY COMMITTEE REPORT

APPENDIX I

ACTIVITIES OF THE STADIUM STUDY COMMITTEE

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STADIUM STUDY COMMITTEE
REPORT

APPENDIX I Part i

STATEMENT TO THE LEGISLATURE
BY THE
HONOURABLE WILLIAM G. DAVIS
PREMIER OF ONTARIO

RE: A DOMED STADIUM

TORONTO, ONTARIO
JUNE 21, 1983

OVER RECENT WEEKS AND MONTHS, THERE HAS BEEN CONSIDERABLE DISCUSSION AND RESULTING PUBLIC INTEREST IN THE PROSPECTS FOR A NEW SPORTS STADIUM TO SERVE THE PEOPLE OF ONTARIO. MOST OF THAT DISCUSSION, TO DATE, HAS CONCENTRATED ON THE NOTION OF AN ENCLOSED, OR DOMED, STADIUM AND, BECAUSE OF THE POPULATION BASE NEEDED TO SUSTAIN THE OPERATION OF SUCH A FACILITY, IT HAS BEEN ASSUMED THAT IT WOULD BE LOCATED IN OR NEAR THE METROPOLITAN TORONTO REGION. CONTRIBUTING TO THIS DISCUSSION, A NUMBER OF SPECIFIC PLANS AND PROPOSALS HAVE BEEN PUT FORWARD. WITHIN THE NEXT FEW WEEKS, I UNDERSTAND, A COMPREHENSIVE REPORT ON THE CNE, INCLUDING RECOMMENDATIONS FOR A DOMED STADIUM, WILL BE COMING FORWARD AND WILL, WITHOUT DOUBT, HEIGHTEN PUBLIC INTEREST EVEN FURTHER.

AFTER A NUMBER OF DISCUSSIONS WITH PEOPLE KNOWLEDGEABLE ABOUT THIS MATTER, INCLUDING THE CHAIRMAN OF METROPOLITAN TORONTO, AND FRIENDS IN OTTAWA, I HAVE COME TO THE CONCLUSION THAT, IF WE ARE TO LOOK, IN A SERIOUS WAY, AT THE POSSIBILITY OF UNDERTAKING CONSTRUCTION OF SUCH A FACILITY, AND IF WE ARE TO ARRIVE AT A REASONABLE, RATIONAL DECISION IN REGARD TO THE ISSUE, PUBLIC DISCUSSION REQUIRES A DEGREE OF FOCUS WHICH IS CURRENTLY LACKING.

FOR THIS REASON, I HAVE DECIDED TO APPOINT A THREE-MAN STUDY GROUP TO EXAMINE VARIOUS MATTERS RELATED TO A POSSIBLE DOMED STADIUM FOR ONTARIO. IN SPECIFIC TERMS, THIS GROUP WILL BE ASKED TO CONSIDER ANY AND ALL PROPOSALS THAT HAVE BEEN DEVELOPED TO DATE, THOSE THAT MAY COME FORWARD IN THE NEAR FUTURE, AND ANY OTHER REASONABLE POSSIBILITIES, AND TO OFFER SUGGESTIONS AND RECOMMENDATIONS IN REGARD TO SUCH MATTERS AS:

1. THE POTENTIAL USES FOR SUCH A STADIUM;

2. THE MOST APPROPRIATE SITE;

3. THE INFRASTRUCTURE REQUIREMENTS, INCLUDING THOSE TO DEAL ADEQUATELY WITH QUESTIONS OF TRAFFIC;

4. THE COSTS OF SUCH A FACILITY, AND RELATED INFRASTRUCTURE;

5. THE FINANCIAL REQUIREMENTS OF ONGOING OPERATION;

6. THE POSSIBLE METHODS OF FUNDING SUCH AN UNDERTAKING;

7. ANY OTHER MATTERS THAT SEEM RELEVANT TO THE ISSUE.

CLEARLY, THE STUDY GROUP WILL HAVE TO MAKE ITSELF AVAILABLE FOR DISCUSSION WITH ANY AND ALL PROPONENTS, MUNICIPAL REPRESENTATIVES, PROSPECTIVE USERS, AND OTHER INTERESTED PARTIES, IN ORDER TO ENSURE THAT ALL IDEAS AND PROSPECTS ARE FULLY CANVASSED AS A BASIS FOR THE REPORT WHICH THEY BRING FORTH.

FINALLY, I WILL ASK THAT THIS REPORT BE COMPLETED BY THE FALL OF THIS YEAR.

I AM PLEASED TO ANNOUNCE THAT THE MEMBERSHIP OF THE STUDY GROUP WILL BE AS FOLLOWS:

THE CHAIRMAN WILL BE MR. HUGH MACAULAY, RECENTLY RETIRED CHAIRMAN OF ONTARIO HYDRO. HIS TWO FELLOW MEMBERS WILL BE MR. WILLIAM BREMNER, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, VICKERS & BENSON COMPANIES LIMITED AND MR. LIONEL SCHIPPER, PRESIDENT OF SCHIPPER ENTERPRISES. MR. RAY MCNEIL, EXECUTIVE COORDINATOR IN MY OFFICE, WILL SERVE AS SECRETARY OF THE STUDY GROUP.

I AM CONVINCED THAT THE EXPERIENCE, COMPETENCE, AND OBJECTIVITY WHICH THESE GENTLEMEN BRING TO THIS ASSIGNMENT WILL PROVIDE US WITH SOUND ADVICE AND MUCH RELEVANT INFORMATION REGARDING THIS PROPOSED PROJECT. WHEN THAT ADVICE AND INFORMATION ARE AVAILABLE, THEN, CLEARLY, POLITICAL JUDGMENT WILL HAVE TO BE APPLIED AT ALL THREE LEVELS OF GOVERNMENT IN DETERMINING THE RELATIVE PRIORITY WHICH SUCH A PROJECT SHOULD HAVE IN THE TOTAL ARRAY OF REQUIREMENTS FACING GOVERNMENTS AT THIS TIME.

I AM SURE THAT ALL MEMBERS OF THIS HOUSE WILL LOOK FORWARD TO THE WORKING GROUP'S REPORT AND WISH THEM EVERY SUCCESS IN WHAT WILL UNDOUBTEDLY BE A MOST INTERESTING AND, HOPEFULLY, WORTHWHILE REVIEW.

- 0 -

Ontario
Executive Council

Order in Council

STADIUM STUDY COMMITTEE
REPORT

APPENDIX I Part ii

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that

WHEREAS there has been considerable discussion and resulting public interest in the prospects for a new sports stadium to serve the people of Ontario;

AND WHEREAS a number of specific plans and proposals have been put forward;

AND WHEREAS it is deemed expedient to bring a degree of focus to the public discussion of this matter;

THEREFORE a three person study group be appointed to examine the options and variables related to a possible domed stadium for Ontario.

And that the study group, to be known as the Stadium Study Committee, consider any and all proposals that have been developed to date, those that may come forward in the near future, and any other reasonable, relevant suggestions;

And that the said Committee offer suggestions and recommendations in regard to such matters as:

1. The potential uses for such a stadium;
2. The most appropriate site;
3. The infrastructure requirements, including those to deal adequately with questions of traffic;
4. The costs of such a facility, and related infrastructure;
5. The financial requirements of ongoing operation;
6. The possible methods of funding such an undertaking;
7. Any other matters that seem relevant to the issue.

And that the said Committee complete its study and submit a report to the Premier by the Fall of this year;

And that the following persons be appointed to the said Stadium Study Committee, effective from the 21st day of June, 1983:

Hugh L. Macaulay, Toronto	- Chairman
William B. Bremner, Toronto	- Member
Lionel H. Schipper, Q.C., Toronto	- Member
Raymond L. McNeil, Scarborough	- Secretary

Recommended William Davis
Premier and President
of the Council

Concurred George R. McCague
Chairman

Approved & Ordered *June 30, 1983*
Date

Lieutenant Governor

STADIUM STUDY COMMITTEE
REPORT

APPENDIX I Part iii

NOTES

FOR MR. HUGH MACAULAY

CHAIRMAN, STADIUM STUDY COMMITTEE

NEWS CONFERENCE

TUESDAY, AUGUST 9, 1983

GOOD MORNING, LADIES AND GENTLEMEN, AND THANK YOU FOR ATTENDING THIS OPPORTUNITY TO PUBLICLY INTRODUCE THE STADIUM STUDY COMMITTEE AND ITS MANDATE.

AS YOU MAY BE AWARE, I HAVE BEEN ASKED BY PREMIER DAVIS TO CHAIR A COMMITTEE ESTABLISHED FOR THE PURPOSE OF BRINGING SOME FOCUS TO THE EXPANDING DISCUSSION AND INCREASING NUMBER OF PROPOSALS RELATING TO A NEW STADIUM IN THIS AREA. THE PREMIER ALSO REQUESTED BILL BREMNER, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF VICKERS-BENSON, AND LIONEL SCHIPPER, PRESIDENT OF SCHIPPER ENTERPRISES, TO SERVE AS MEMBERS OF THE COMMITTEE, AND I AM PLEASED TO INTRODUCE THEM TO YOU TODAY. RAY MCNEIL OF THE PREMIER'S OFFICE WILL SERVE AS COMMITTEE SECRETARY.

LET ME TURN NOW TO THE COMMITTEE'S MANDATE:

> "TO MAKE SPECIFIC RECOMMENDATIONS TO THE PREMIER OF ONTARIO, AS SOON AS POSSIBLE, WITH RESPECT TO THE FOLLOWING ISSUES RELATING TO A NEW STADIUM IN OR NEAR THE METROPOLITAN TORONTO AREA:
>
> : THE LOCATION OF THE STADIUM, WITH PARTICULAR EMPHASIS ON TRANSPORTATION;
> : THE USES THE STADIUM COULD AND SHOULD ACCOMMODATE;
> : THE TYPE OF STRUCTURE AND, IN PARTICULAR, WHETHER AND HOW IT SHOULD BE COVERED;
> : THE ESTIMATED CAPITAL COSTS OF THE STADIUM AND NECESSARY SUPPORTING FACILITIES;

..2

: THE METHODS OF FINANCING CONSTRUCTION;
: THE SOURCES OF OPERATING REVENUES AND OPERATING EXPENSES;
: THE CONCEPTS OF OWNERSHIP AND MANAGEMENT,
: TIMING.

"THE COMMITTEE INVITES ALL INTERESTED PERSONS TO MAKE SUBMISSIONS IN WRITING DEALING WITH ALL OR ANY OF THE ISSUES REFERRED TO ABOVE. ALL INFORMATION AND MATERIAL SUBMITTED TO THE COMMITTEE MAY BE USED BY THE COMMITTEE AND MAY BE MADE AVAILABLE TO MEMBERS OF THE PUBLIC.

"IT IS NOT PART OF THE COMMITTEE'S MANDATE TO MAKE A RECOMMENDATION AS TO WHETHER OR NOT A NEW STADIUM IS NECESSARY OR DESIRABLE. THIS IS NOT A FORMAL TENDERING PROCESS, BUT RATHER IT IS AN INVESTIGATIVE REVIEW OF THE MOST FEASIBLE ALTERNATIVES FROM A NUMBER OF PERSPECTIVES. THUS, IT IS NOT THE COMMITTEE'S MANDATE TO ASK FOR, ENTERTAIN, OR CHOOSE BETWEEN SPECIFIC AND FORMAL BIDS FOR ACTUAL OWNERSHIP, CONSTRUCTION OR MANAGEMENT OF THE STADIUM OR ANY PART THEREOF."

WITHIN THE NEXT DAY OR TWO, WE WILL ALSO BE PLACING ADVERTISEMENTS INVITING INTERESTED PARTIES TO PRESENT PROPOSALS TO US.

WE WANT ALL OF THESE PROPOSALS IN WRITING, AND I HOPE EVERYONE WILL UNDERSTAND WHY.

OUR ASSIGNMENT IS TO RECEIVE PROPOSALS FROM ALL INTERESTED PARTIES.

OUR DEADLINE FOR RECEIVING THEM IS SEPTEMBER 30, 1983.

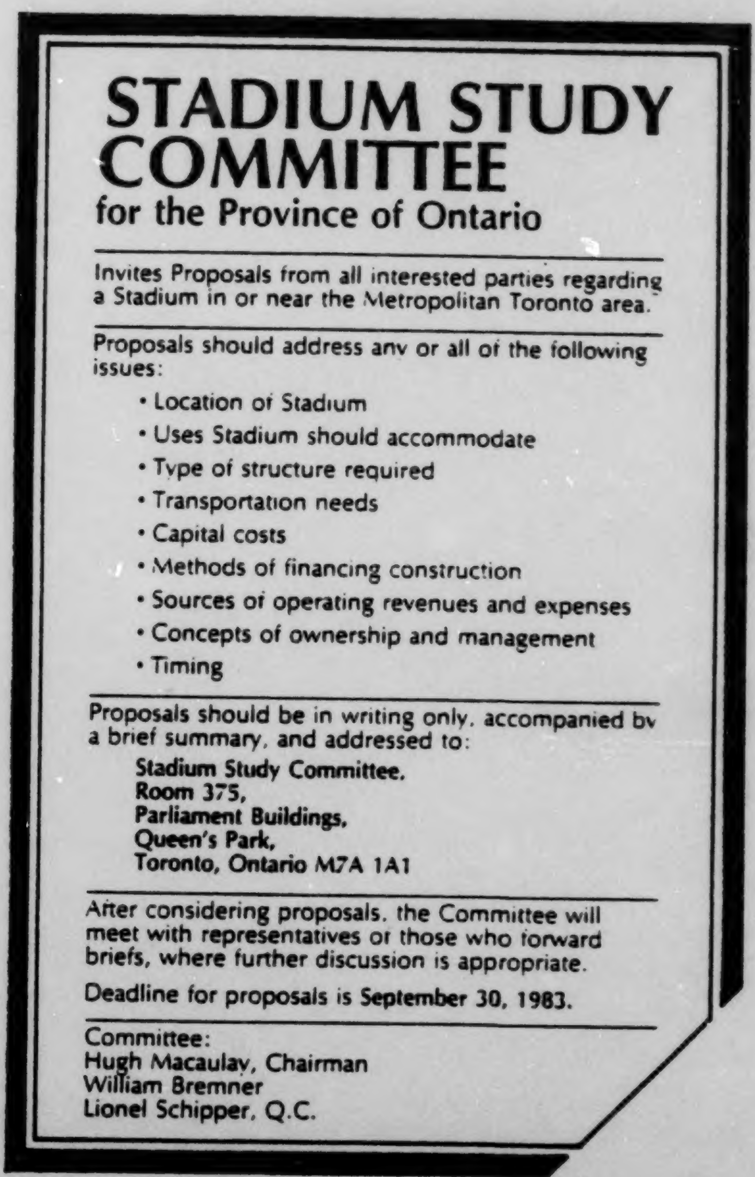
AFTER CONSIDERING PROPOSALS, THE COMMITTEE WILL MEET WITH REPRESENTATIVES OF THOSE WHO FORWARDED BRIEFS, WHERE FURTHER DISCUSSION IS APPROPRIATE.

IN THE EVENT THAT ANY OF YOU WOULD WISH TO BEGIN DISCUSSION THIS MORNING, MY ASSOCIATES AND I WOULD BE PLEASED TO ANSWER ANY QUESTIONS YOU MAY HAVE AT THIS POINT.

STADIUM STUDY COMMITTEE REPORT

APPENDIX I Part iv

PUBLIC ADVERTISEMENT



STADIUM STUDY COMMITTEE

for the Province of Ontario

Invites Proposals from all interested parties regarding a Stadium in or near the Metropolitan Toronto area.

Proposals should address any or all of the following issues:

- Location of Stadium
- Uses Stadium should accommodate
- Type of structure required
- Transportation needs
- Capital costs
- Methods of financing construction
- Sources of operating revenues and expenses
- Concepts of ownership and management
- Timing

Proposals should be in writing only, accompanied by a brief summary, and addressed to:

Stadium Study Committee,
Room 375,
Parliament Buildings,
Queen's Park,
Toronto, Ontario M7A 1A1

After considering proposals, the Committee will meet with representatives of those who forward briefs, where further discussion is appropriate.

Deadline for proposals is **September 30, 1983.**

Committee:
Hugh Macaulay, Chairman
William Bremner
Lionel Schipper, Q.C.

STADIUM STUDY COMMITTEE
REPORT

APPENDIX I Part v

CRITERIA CONSIDERATIONS IN REGARD TO STADIUM PROPOSALS

Notes: 1. There will inevitably be overlap between questions asked under one technical aspect and those asked under another.

2. This is a preliminary list of the types of questions that the Committee may want to address. It is proposed that submitters of proposals be invited to respond to as many of these as they wish.

August 8th, 1983

1. MARKETING AND PROGRAMMING

1.1. Purpose : For what uses is this building being built?

1.2. Market Research : What do you estimate the size of the market to be for its various uses?

: What are its demographics?

: In particular, what do you think will be the audience draw by distance?

: What competition is there from existing sites (as hosts for current users)?

- to what degree do you think patrons will be willing to relocate?
- to what degree do you think users will be willing to relocate?

1.3. Marketing the Stadium : What plans do the owners have to market the building itself?

: What previous experience and current knowledge do they have in getting events?

: What serious proposals do they have on which to base a reasonably full program for a year (say a minimum of 200 dates a year)?

: What will be the "pro-amateur-other" split?

1.4. Value Added : What associated investments, improvements in nearby existing operations, can help support or justify the costs of the stadium?

1.5. Overall Economic Impact: What will be the multiplier effect on the local economy?

1.6. Net Revenue : What net revenue, projected from attainable and realistic financial data, is possible over the short, medium and long term?

2. PLANNING

2.1. The Policy Context : What land use and development policies, as expressed in Official Plans (Part I Plans and Part II or District Plans) will affect the site?

: What changes to policy instruments will be necessary?

2.2. The Regulation Context: What regulations affect the site?

: What are the applicable provisions of zoning by-laws?

: What design guidelines are likely to be applied in a site plan by-law?

: What regulations may be applied by a Conservation Authority governing fill?

: What changes to any of the above may be needed?

2.3. The Use Context : What will the general vicinity of the site be like, including existing and prospective facilities which would be supportive of a stadium such as restaurants lounges, hotels, etc.?

: How might such facilities be attracted?

2.4. Impact : What will the impact of the stadium on the surrounding area be in terms of

- stimulus to growth and change?
- noise generated?
- glare generated?
- traffic infiltration?
- vista and other views?
- reduced use of other sites?

2.5. Adequacy of Services : What is the adequacy of existing water, sewage, drainage, hydro-electricity, security, hospitals and fire fighting equipment servicing the site?

: What improvements are necessary?

3. TRAFFIC PLANNING AND ENGINEERING

3.1. Accessibility	:	Is the site accessible by road and public transit within a reasonable length of time for the maximum crowd size expected?
3.2. Evacuation Rate	:	How long will it take for the traffic system serving the site to return to normal assuming a) no new construction? b) proposed new construction?
3.3. Size of Site	:	How big is the site and what does it accommodate?
3.4. Ancillary terminal and special parking	:	What bus pickup/drop off and storage area are available and where?
3.5. Arterial streets and freeway lanes	:	What arterial street and/or freeway lanes will be available
	:	What is their basic physical and financial feasibility?
	:	What impact will a stadium have on non-stadium traffic?
3.6. Cost effectiveness of new transportation infrastructure	:	What will be the cost effectiveness of any new transportation infrastructure?
	:	To what degree will its use be shared by other facilities?
3.7 Parking	:	What provision has been made for parking?
	:	How does the parking provision interact with a) entry to and exit from the stadium vicinity? b) entry to and exit from the actual stadium?
3.8. Potential of Surrounding neighbourhood	:	What is the nature of and potential for change of neighbouring land uses?

3.9. Central location of site : What is the relationship of the site to its market?

3.10. Non-spectator traffic needs : How easily will local and visiting teams, workers etc. be able to get to and from the site?

3.11. Catalyst nature of stadium : Can the stadium be considered a catalyst for other development? If so, what are the broad traffic planning implications?

3.12. Other sports facilities on site : Will other sports facilities be considered on the site or on an adjacent site?

3.13. Free standing or mixed use? : Will the stadium be free standing or as one element in a mixed use centre?

4. STRUCTURAL ENGINEERING

4.1. The Site : What will be the cost penalties of working this site?

: What will the settlement problems be over time?

4.2. Structure and Construction : Is the concept suitable for our climatic conditions and needs?

: Are there non-standard features to your design? If so, even if they are not proven, what assurance can be given that they will work?

: Have you demonstrated that the design is a safe design, especially in "collapse" situations?

: To what degree are the construction element likely to be of Canadian manufacture?

: What is the manufacturing competitiveness of products and manufacture?

: To what degree do products represent energy conservation?

: To what degree do products and materials require low maintenance?

: To what degree have you worked out a construction schedule (especially in relation to existing users)?

: What phasing and time periods does this schedule imply (especially in relation to existing users)?

: Will the impact of the structure on the cityscope/neighbourhood be "friendly"?

4.3. Operations : To what degree do finishings require low maintenance in materials and labour?

: To what degree are operational costs low in energy consumption, maintenance and security?

: How has the movement of people into, in and out of the building been planned?

5. CONSTRUCTION COSTING AND QUANTITY SURVEYING

5.1. Cost of Land : What are the land components, how will they be acquired, and how much will they cost?

5.2. Cost of Construction : What are the basic costs (and the basis for calculating them):

- architectural?
- structural?
- mechanical?
- electrical?
- other? (demolition, site preparation, etc.)

5.3. Furnishings and Special Equipment : What will be the costs of

- furnishings (by basic category)?
- equipment (by major category)?

5.4. Areas and Quantities : What are the square footages of major components?

: What are the quantities of major components (e.g. seats)?

5.5. Outline of Construction : e.g.

- will the building be of reinforced concrete or structural steel?
- what kind of cladding will be used?
- etc.

5.6. Non-standard Features : What elements of the building represent unusual construction features?

5.7. Construction Approach : What control methods will be used, e.g.

- general contractor?
- project manager?
- phasing and timing?
- cost implications of delays
- etc.

5.8. Operations : What projections have you made of annual operating costs, including maintenance, and the timing of replacement costs?

5.9. **Life-cycle Costing** : What cost benefit analysis of the stadium's impact can be made

- generally?
- with particular reference to the surrounding community/area?
- by recouping some capital costs by approaching specific sponsors?

6. FINANCING

6.1. Capital

: What are the major alternatives for generating the capital needed for the building?

: What are the ownership options?

6.2. Operations

: Under what circumstances will the stadium be viable? e.g., among others:

a) as a totally private enterprise under existing policies and regulations?
b) as a totally private enterprise with changes in policies and or regulations?
c) as a privately operated enterprise with some public money
    - o public capital depreciated over a number of years
    - o public capital written off
d) as a privately operated enterprise with some annual subsidy?
e) as a publicly owned and operated enterprise?

: What are the ownership/management/revenue and expense implications of your proposal?

: What are the tax implications of ownership options?

: What is the long-term exposure in subsidizing operating costs?

STADIUM STUDY COMMITTEE REPORT

APPENDIX I Part vi

LIST OF VISITS TO OTHER STADIA BY COMMITTEE MEMBERS

Houston
Jimmie D. Fore,
Executive Director,
Houston Astrodome,
Houston, Texas

Vancouver
Paul Manning
Vice-President,
Corporate Relations
British Columbia Place
Vancouver,
British Columbia

Seattle
Ted Bowsfield
Kingdome,
Seattle,
Washington, D.C.

Jay Green
as above

Minnesota
Mr. Dennis L. Alfton,
Administrative Assistant
Metropolitan Sports
Facilities Commission,
900 South 5th Street,
Minneapolis, Minnesota 55415

New Orleans
Mr. Bill Curl,
Vice-President, Marketing and Public Relations,
Louisiana Superdome,
Sugarbowl Drive,
New Orleans, Louisiana 70112

Halifax
Mr. James Sykes,
Director, Planning and Development,
Central Services Building,
Dalhousie University,
Halifax, Nova Scotia

Mr. David Ness,
Building Manager,
Dept. of Physical Plant,
Central Services Building

Syracuse

Mr. Thomas F. Benzel,
Managing Director,
Carrier Dome,
Syracuse University,
Syracuse, New York 13210

New Jersey

Mr. Ted Wolff
Assistant Director of Public Relations,
New Jersey Sports & Exposition Authority,
Brendanyrne Area,
East Rutherford, New Jersey 07073

Mr. Leslie H. Unger
Director of Public Relations
(Same as above)

Los Angeles

Mr. Robert Schweppe
Los Angeles Dodgers,
Dodgers Stadium,
1000 Elysian Park Avenue,
Los Angeles, California 90012

Mr. Peter O'Malley
(Same as above)

Anaheim

Mr. William Turner
Operations Manager,
Anaheim Stadium,
2000 S. State College Blvd.,
Anaheim, California 92806

STADIUM STUDY COMMITTEE REPORT

APPENDIX I Part vii

ORGANIZATIONS AND PERSONS THAT SUBMITTED BRIEFS AND/OR APPEARED BEFORE THE COMMITTEE

Accumax Consultants
  McConnell, Maxwell

Advantech Development Corp.
  Fan, Norbert C., President

Air Roofs Canada
  Goering, Peter L.E.

Anderson, R.V.

Atlas Alloys
  Pearson, William

Atlas Steels
  Orr, Allan V., Vice-President

Aurora, Town of
  Illingworth, Dick, Mayor

Ayerhart, Phil G.E.

Baker, C.M.

Band, Philip E., Q.C.

Barbour, Stan

Bech-Hansen, Max

Behavioral Team, A Corporation
  Barkow, Ben, President

Bergman & Hamann
  Scott, David C., Partner

Beriault, Rev. M.A.

Blake, Cassels & Graydon
  McCallum, J.F.

Blenkhorn & Sawle Ltd. Pro. Eng.
  Carr, D.E., Senior Vice-President

Board of Trade of Metropolitan Toronto
  Collins, J.A., General Manager
  Herrick, J.

Bobrowski, Jan and Partners Ltd.
  Bobrowski, Jan, President

Brampton Board of Trade
  Coulter, K.T., President

Brampton, City of
  Whillans, Ken, Mayor

Breaugh, M., M.P.P.

Bril, Zenon

Brothers, Karin

Burlington Chamber of Commerce
  Pink, Ron, President

CN Tower
  Garrick, David E., General Manager

Canadian Association of Exposition Managers
  MacGregor, Hugh F., President
  Garneau, Peter, G., Director

Canadian Foundation Co. Ltd.
  Kindbom, R., President
  Tannenbaum, L.

Canadian National Exhibition
  McMahon, Gary W., President

Canadian National Sportsman Shows
  Shield, Harold D., President

Canadian Olympic Association
  Worrall, J., Q.C.

Canadian Portland Cement Association
  Ettinger, Norman B., National Accounts Executive

Canadian Steel Construction Council
  Cran, J.A., Chairman, Codes and Standards Committee

Canadian Wood Structures Ltd.
  Atkinson, James S., Vice-President
  Turner, Marshall

Capital Canada Ltd.
  Foster, Robert J.
  Drayton, Richard L.

Carruthers & Wallace Ltd.
  Welsh, C.E., President
  Springfield, J., Vice-President

Chapman, A.N. Ltd.
  Chapman, Albert N., President

Cole, A.S.R. (Appraisal Consultant)

Commercial Viability of Domed Stadia
  Touchette, Pierre

Communications Canada
  Tomczyk, B.

Cook, Digby

Cooper Graphics & Associates Ltd.
  Cooper, Al

Cooper Split Roller Bearing Co.
  Grainger, J.F.

Copeland, Michael

Cousens, Don, M.P.P.

Crang & Boake
  Crang, Jim

Crichton, Jean

Daf Indal Ltd.
  Rutledge, G.R., President

Danby, Ian

Dancey, Ronald L. , Regional Councillor
  Oulton, Nancy, Executive Assistant to the Mayor
  Palmer, Christine, Deputy Clerk

Dean-Chandler Waterproofing Limited
Tomejenovic, Matthew, President

Decima Research Ltd.
White, Greg

Dempsey, Andre M., Q.C.

Department of the City Clerk
Henderson, R.V., City Clerk

Dome Dollar Game

Dominion Stores
Toma, J.C.

Doyle, T.K., C.A.

Dubina, P.W.

Duggan, Michael

Durham, Regional Municipality
Herrema, Gary, Regional Chairman

Dywidag Systems International Canada Ltd.
Kast, Gary, Manager

ECE Group Ltd.
Granek, Gerry, Partner

East Gwillimbury, Town of
Morton, Angus M., Mayor

Eastern Construction Company Ltd.
Odette, E.G., President

Ensphere Group
Bradshaw, J.B., President

Etobicoke, City of
Flynn, Dennis, Mayor

Everlite A/S
Sokoler, H., Managing Director

Exhibition Place, Board of Governors
Cohon, George A., Chairman

Eyres, Mrs. A.H.

Faichney, J.

Ferguson, Michael

Flis, Jesse F., M.P.

G.S. Con Ltd.
  Suhanic, George, President

Gapcan Ltd.
  Engstrom, H.E., President
  Kowel, P.D., Vice-President

Gaudet, Norman

Geiger Berger
  Geiger, David H., Principal

General Mills Canada Ltd.
  Aymong, A.M., Senior Vice-President

Georgina, Township of
  McLean, John, Regional Councillor

Gladwin, Tim

Gnuvian Developments Ltd.
  Knight, Robert F.

Goldes, A.A. & Associates Ltd.
  Goldes, A.A.

Green River Residents Association
  Bainbridge, G., President

Gregory, Bud, M.P.P.

Halton, Regional Municipality of
  Barrett, Harry, Chairman

Hamilton, Kemp Architects
  Hamilton, Peter W.

Hatch Associates Ltd.
  Yates, J. Roger, Senior Consulting Engineer

Hauck, Mrs. C.A.

Henderson, R.T.

Hodgson, William, M.P.P.

Hubler, R. & Associates
  Hubler, Robert L. (Jr.)

Hudecki, Stanley M., M.P.

Hunter, J.J.

Industrial Trade Shows of Canada
  Gowdy, R.M., President

Ingebertson, Carl H.

Irwin Seating Company
  Dewey, Dean H.

Jackson, Robert W., M.D.

Jenkins, D.L.

Joel, Aubrey

Jones, Frank E.

Jones, Terry D., M.P.P

Jose, Colin

Kennedy, David K.

Kingsborough, George

Kramer, Martin H.

Lawton, Jerry

Le, Trung Van

Lennox Real Estate
  Bittner, Oskar

Lesage, James M.

Lewis, James C.

Leybourne, Darrell

Loiselle, Maurice P.

MacQuarrie, Robert W., Q.C., M.P.P.

Malik, Daman

Malton, W.H.

Marathon Realty Co. Ltd.
  Mitchell, D.B., Director of Planning

Marini, Allan G.

Markham, Town of
  Roman, Anthony, Mayor
  Dancey, Ronald L., Regional Councillor
  Oulton, Nancy, Executive Assistant to the Mayor
  Palmer, Christine, Deputy Clerk

  Marshall Macklin Monaghan Ltd.
  Longden, C.W., Director

Martin Amber's Wide Wonderful World
  Amber, M., Director

McGee, Jack Chevrolet - Oldsmobile - Cadillac (1978) Ltd.
  McGree, John R.

McLean, Allan K., M.P.P.

McLean, Glenn M.

Metropolitan Toronto Convention & Visitors Association
  Duron, William M., President

Metropolitan Toronto, Muncipality of
  Godfrey, Paul, Chairman
  Floyd, D., Executive Director - Economic Development

Milani & Milani Holdings Ltd.
  Milani, C.D., President

Miller Paving Limited
  McArthur, Leo A., President

Milne, J.A.S.

Mississauga City Board of Trade
  Keyser, John B., Q.C., President

Mississauga Transit
  Dowling, E.J., General Manager

Mississauga, City of
  McCallion, Hazel, Mayor
  McGillivray, L.M., Deputy City Clerk
  Edmonds, R.G.B., Commissioner of Planning
  Julian, Terence L., City Clerk

Murray, James A.

Newmarket, Town of
  Twinney, Raymond J., Mayor

North York Hydro
  Bedder, Jack B., Chairman

North York, City of
  Lastman, Mel, Mayor

O'Dell, Peter

O'Gorman, John T.

Oakville Chamber of Commerce
  Caine, Michael H., President

Omega Property Management Ltd.
  Navis, Gordon, President

Ontario Coalition to Preserve Foodlands
  Van Donkersgord, Elbert, Chairman

Ontario International Corporation
  Graham, J.J., Vice-President

Ontario Jockey Club
  Kenney, J.H., President
  Baker, Charles, Chairman of the Board

Ontario Lottery Corporation
  Morris, Norm, President

Ontario Ministry of Agriculture and Food
  Timbrell, Dennis R., Minister

Ontario Ministry of Industry and Trade
  Miller, Frank S., Minister
  Taylor, Don F., Consultant

Ontario Ministry of Intergovernmental Affairs
  Kennedy, Douglas, M.P.P.

Ontario Ministry of Natural Resources
  Pope, Alan W., Minister

Ontario Ministry of Tourism and Recreation
  Baetz, Reuben C., Minister
  Secord, R.E., Assistant Deputy Minister

Ontario Ministry of Transportation and Communications
  Snow, The Hon. James, Minister

Ontario Ministry of Treasury and Economics
  McIntyre, G., Assistant Deputy Minister

Ontario Ministry of the Attorney General
  McMurtry, R. Roy, Attorney General

Ontario Office of the Deputy Premier
  Welch, Robert, M.P.P.

Ontario Place Corporation
  Cooper, William P., Chairman

Ontario Sports Centre Inc.
  Malamet, Dan, Director

Ophek, Eli

Oshawa, City of
  Pilkey, Allan C., Mayor

Palma, Len

Parking Authority of Toronto
  Lewis, Reginald W., General Manager

Paul, Gerald

Peel Regional Police Force
  Burrows, Douglas K., Chief of Police

Peel, Regional Municipality of
  Bean, R. Frank, Chairman
  Allen, P.E., Commissioner of Planning

People or Planes Committee
  Godfrey, C.M., Chairman

Peters, Joe

Phillips Barratt Kaiser
  Ott, D.
  McCoy, D.

Plumb, Dorothy

Prout, Maurice

Pyke, Mrs. Stephen

Ramada Hotel - Airport West
  Gowers, Christopher R.H.

Richmond Hill, Town of
  Duffy, A., Mayor
  Weldon, C.D., Chief Administrative Officer

Robbie Architects Planners
  Robbie, Roderick

Robertson Building Systems Ltd.
  Harding, W.C., Vice-President

Rockwell Family

Ross, John H.

SNC Engineering & Project Mgmt.
  Rowe, I.H.

Sandles, William R.

Scarborough, City of
  Poots, J.J., City Clerk

Scott, Geoff, M.P.

Sefton, W. & Associates Ltd.
  Sefton, W.

Shipp Corporation
  Shipp, Harold G., President

Silvester, John

Simone, Peter

Skidmore, Owings & Merrill
  Dyangan, H.
  Korista, S.

Southex Exhibitions
  McClure, Donald E., Vice-President

Spiers, William

Sportbau Canada Ltd.
  Huber, Rolf, President

Stadium Publishing Co.
  Wheeler, Gary, Publisher

Standard Broadcasting Co. Ltd.
  Hartford, Don, President, Radio Divison

Stelco Inc.
  Bowlby, G.W.R., Vice-President

Stephenson, Bette, M.D., M.P.P.

Stevenson, K. Ross, M.P.P.

Stewart, Young & Mason Ltd.
  Williams, A.G.

Stratford, City
  Hunt, Paul, Deputy City Clerk

Taylor, James, Q.C., M.P.P.

Toronto Argonauts Football Club/Carling O'Keefe
  Barnett, John R., Senior Vice-President

Toronto Blizzard Inc.
  Toye, Clive, President

Toronto Blue Jays Baseball Club
  Luba, R.W.

Toronto International Airport Hotel Association
  Usher, Terry, President

Toronto International Auto Show
  Tonks, Tom, Show Manager

Toronto International Centre of Commerce
  Shenkman, Stanley R., President

Toronto Planning & Development, City of
  McLaughlin, Stephen G.

Toronto Transit Commission
  Savage, A.H., Chief General Manager

Toronto, City of
  Eggleton, Arthur C., Mayor

Toronto, Council Chamber
  Campbell, J., Alderman
  Gilbert, R., Alderman
  Layton, J., Alderman
  Pantalone, J., Alderman
  Reville, D., Alderman
  Thomas, D., Alderman

Toronto, Dept. of the City Clerk
  Henderson, Roy V.

Toronto-Central Ontario Construction Industry Government Affairs
  Committee
  Bulmer, J.C., Co-Chairman
  Johnson, James, Co-Chairman

Trillium Dome Corporation
  Shipp, Harold G., President

Triodetic Structures Ltd.
  Fentiman, H.G., President

Ultradome Consortium
  Parazader, Stephen, President

Unterman, Paul S.

Uxbridge, Township of
  Ballinger, Wm. G., Mayor

Vasey, H.M.

Venture Inns of Canada Ltd.
  Elliott, J.D., Executive Vice-President

Versa Services
  Denham, D.A., Vice-President

Wakeham, John Thomas

Waterloo, City of
  Keeling, Ron, City Clerk

Welland, City of
  Turner, F.D., City Treasurer

Whitby, Town of
  Attersley, R.A., Mayor

Whitchurch-Stouffville, Town of
  King, Eldred, Mayor

Whitevale & District Residents Association
  Loth, Linda, President

Whittamore, Dave

Williams, John, M.P.P.

Williams, Sydney A.

Willis, Eric

Woods, David

Woods, I.K. and Partners Inc.
  Woods, I.K.

Yolles, M.S., & Partners Ltd.
  Yolles, Morden, President

York Hannover Development Ltd.
  Kendrick, G.N., Senior Vice-President

York University
  MacDonald, H. Ian, President
  Bell, Dr. George, Vice-President

York, Borough of
  Colle, Mike, Alderman

York, Regional Municipality of
  Forhan, Bob, Chairman

STADIUM STUDY COMMITTEE REPORT

APPENDIX I Part viii

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Noll, Roger G.: Government And The Sports Business, The Brookings Institution, Washington, D.C., 1974.

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STADIUM STUDY COMMITTEE REPORT

APPENDIX II

DESCRIPTION OF INDIVIDUAL SITE PROPOSALS

STADIUM STUDY COMMITTEE REPORT

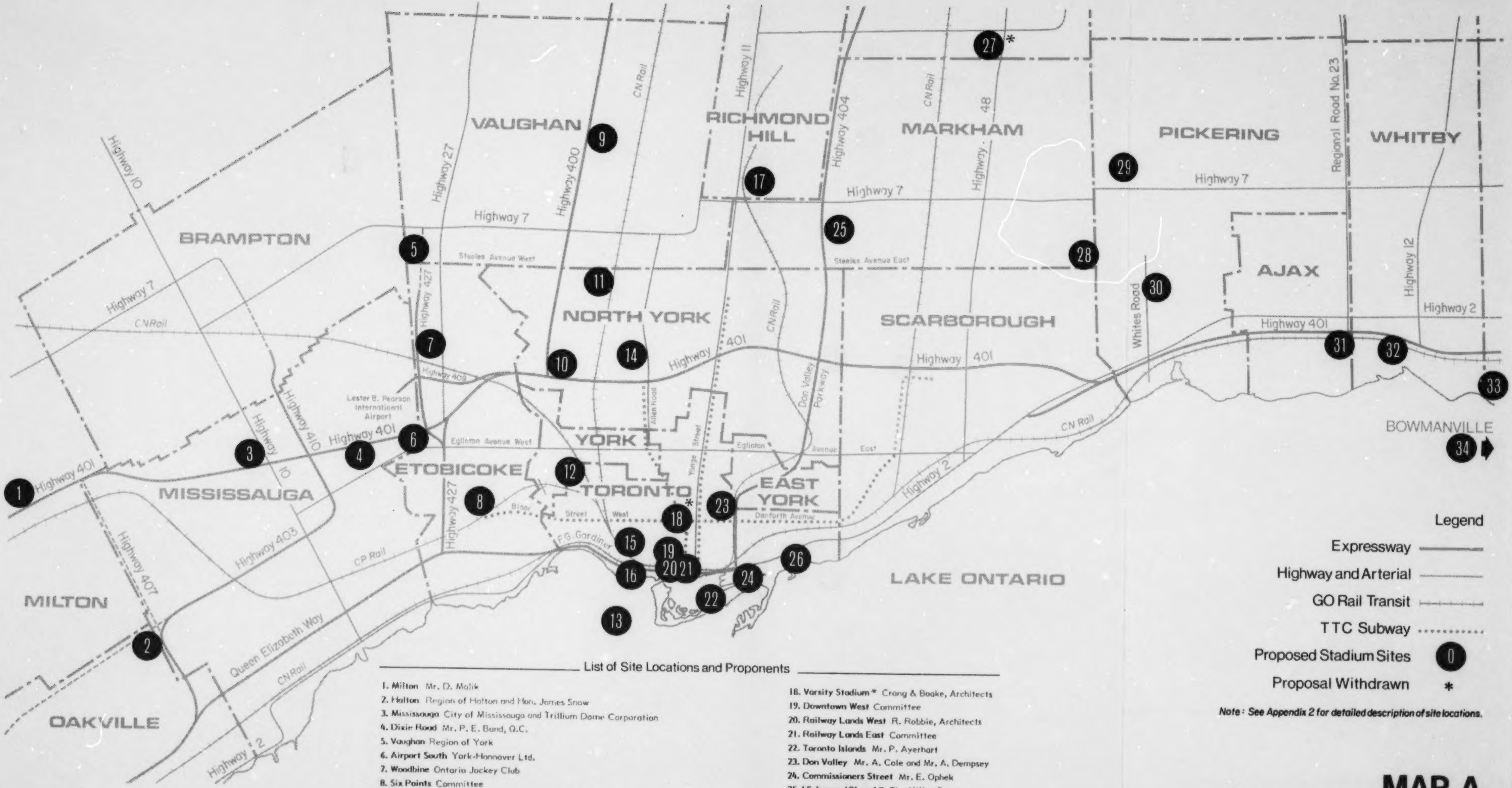
APPENDIX II

DESCRIPTION OF INDIVIDUAL SITES

Map Showing Location Of All Suggested Sites

Part i Details on Selected Location Proposals

Part ii List of Other Proposals and Proponents



Note: See Appendix 2 for detailed description of site locations.

List of Site Locations and Proponents

1. **Milton** Mr. D. Malik
2. **Halton** Region of Halton and Hon. James Snow
3. **Mississauga** City of Mississauga and Trillium Dome Corporation
4. **Dixie Road** Mr. P. E. Band, Q.C.
5. **Vaughan** Region of York
6. **Airport South** York-Hannover Ltd.
7. **Woodbine** Ontario Jockey Club
8. **Six Points** Committee
9. **Canada's Wonderland** Committee
10. **Highways 400 and 401** Mr. J. Ross
11. **York University** York University
12. **Keele Street and St. Clair Avenue West** Mr. P. Simone
13. **Floating Stadium** Mr. R. Hubler, Jr.
14. **Downsview** Committee and Several Individuals
15. **Lamport Stadium** Mrs. A. Eyres
16. **Exhibition Place** Metropolitan Toronto and City of Toronto
17. **Richmond Hill** Town of Richmond Hill, Region of York, and A. N. Chapman Ltd.
18. **Varsity Stadium*** Crang & Boake, Architects
19. **Downtown West** Committee
20. **Railway Lands West** R. Robbie, Architects
21. **Railway Lands East** Committee
22. **Toronto Islands** Mr. P. Ayerhart
23. **Don Valley** Mr. A. Cole and Mr. A. Dempsey
24. **Commissioners Street** Mr. E. Ophek
25. **Highways 404 and 7** The Miller Group
26. **Greenwood** Committee
27. **Highways 47 and 48*** Lennox Real Estate Ltd.
28. **Markham** Region of York and Town of Markham
29. **Pickering Airport** Committee
30. **White's Road, Pickering** Region of Durham
31. **Ajax** Region of Durham
32. **Whitby** Region of Durham and Town of Whitby
33. **Oshawa** Region of Durham and City of Oshawa
34. **Bowmanville** Mr. M. Prout

MAP A

Locations of Proposed Stadium Sites

DETAILS ON SELECTED LOCATION PROPOSALS
(numbers refer to Map locations)

(2) Halton
(Proposed separately by Hon. James Snow and the Region of Halton)

(3) Mississauga
(Proposed jointly by the City of Mississauga and the Trillium Dome Corporation)

(6) Airport South
(Proposed by York-Hannover Developments Ltd.)

(7) Woodbine
(Proposed by the Ontario Jockey Club)

(8) Six Points
(Suggested by Committee consultant)

(11) York University
(Proposed by York University)

(14) Downsview
(Suggested in several letters to the Committee but not officially proposed)

(17) Richmond Hill
(Proposed separately by the Town of Richmond Hill, the Region of York and A.N. Chapman Ltd.)

(16) Exhibition Place
(Proposed by the City of Toronto and the Municipality of Metropolitan Toronto)

(18) Varsity Stadium
(Proposed by Crang and Boake, Architects, withdrawn by the University of Toronto)

(19) Downtown West (King/Spadina/John/Front)
(Suggested by Committee consultant)

(20) Railway lands west of CN Tower
(Proposed by R. Robbie, Architects)

(21) Railway lands east of CN Tower
(Suggested by Committee consultant)

(25) Highways 404 & 7
(Proposed by Miller Paving)

(28) Markham
(Proposed separately by Region of York
and Town of Markham)

(30) Pickering
(Proposed by Region of Durham)

(31) Ajax
(Proposed by Region of Durham)

(32) Whitby
(Proposed separately by Region of Durham
and Town of Whitby)

(33) Oshawa
(Proposed separately by Region of Durham
and City of Oshawa)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Halton (Snow)

Site Location*: South-west corner of Hwy 403 and Hwy 407.

Proposer(s):

B.H. Barrett
Mayor, Town of Oakville
P.O. Box 7000
1151 Bronte Road
Oakville, Ont.
L6J 6E1
(416) 827-2151

Hon. James Snow
MPP-Oakville
Ferguson Block
Queen's Park
Toronto, Ontario
(416) 965-2101

Relationship of Proposer to Location: Within jurisdiction

Size of Site: 170 acres - Snow Proposal
300 acres - Halton Proposal

Current Ownership of Land (if different from proposer):

Province of Ontario and Ontario Hydro

Transportation Access and Parking Provisions (Current or future):

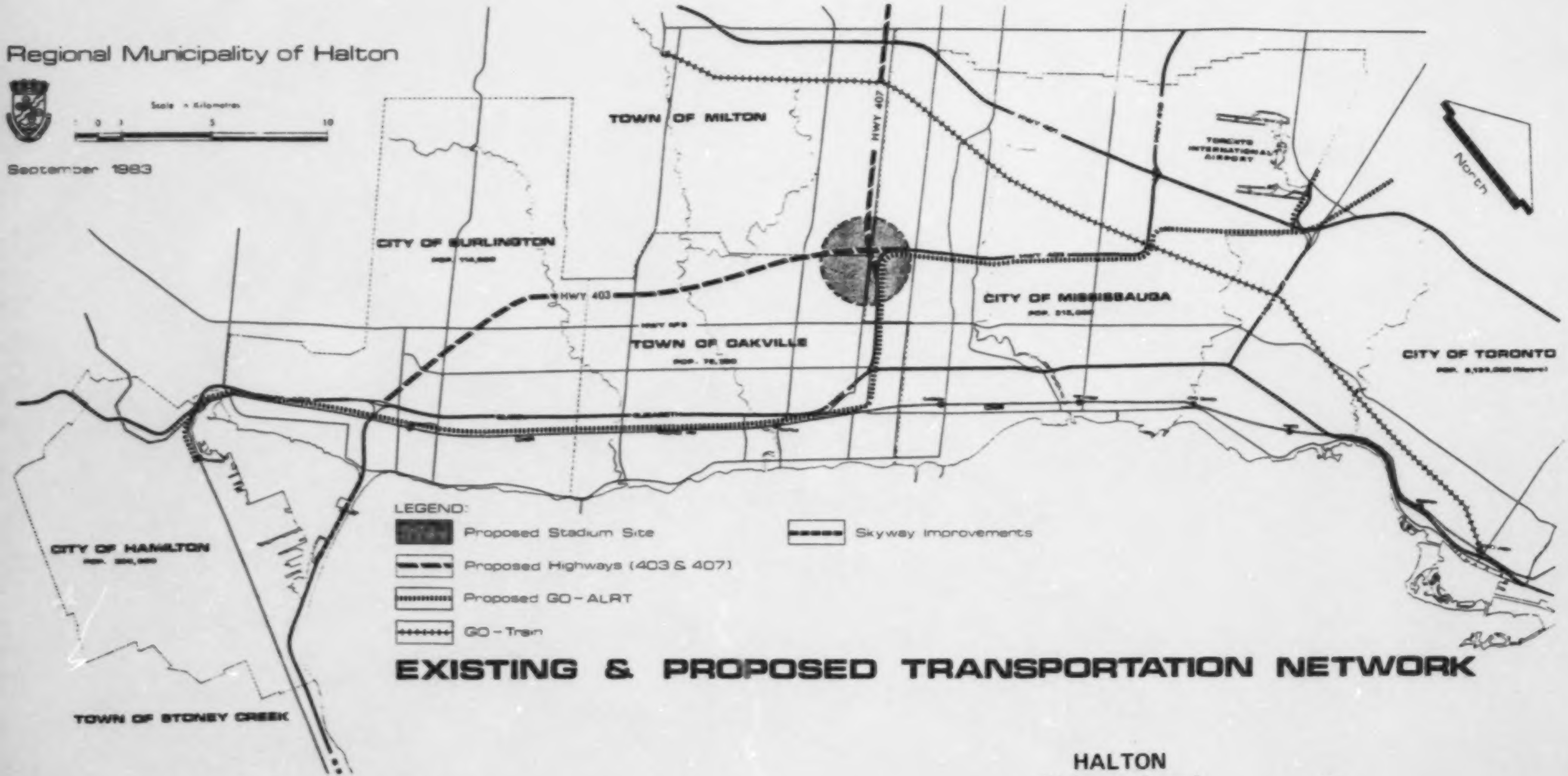
Access via Hwy 403, Hwy 407 and Go-ALRT.

15,000 parking spaces on site.

Stadium and Related Facilities (if described):

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



EXISTING & PROPOSED TRANSPORTATION NETWORK

HALTON
(Halton – Snow)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Mississauga (Trillium Dome Corp.)

Site Location*: Hwy 401 and Hwy 10 (Hurontario St.)

Proposer(s): Harold G. Shipp
President
Trillium Dome Corp.
Mississauga Executive Centre
Suite 1100
Two Robert Speck Parkway
Mississauga, Ont.
L4Z 1H8
(416) 275-2750

Relationship of Proposer to Location: Owner

Size of Site: 300 acres (plus almost 2000 acres for adjacent development)

Current Ownership of Land: Consortium

Transportation Access and Parking Provisions (Current or future):

Access by Hwy 401, Hwy 10, Mavis Road and proposed GO-ALRT 18,000 Parking Spaces Available

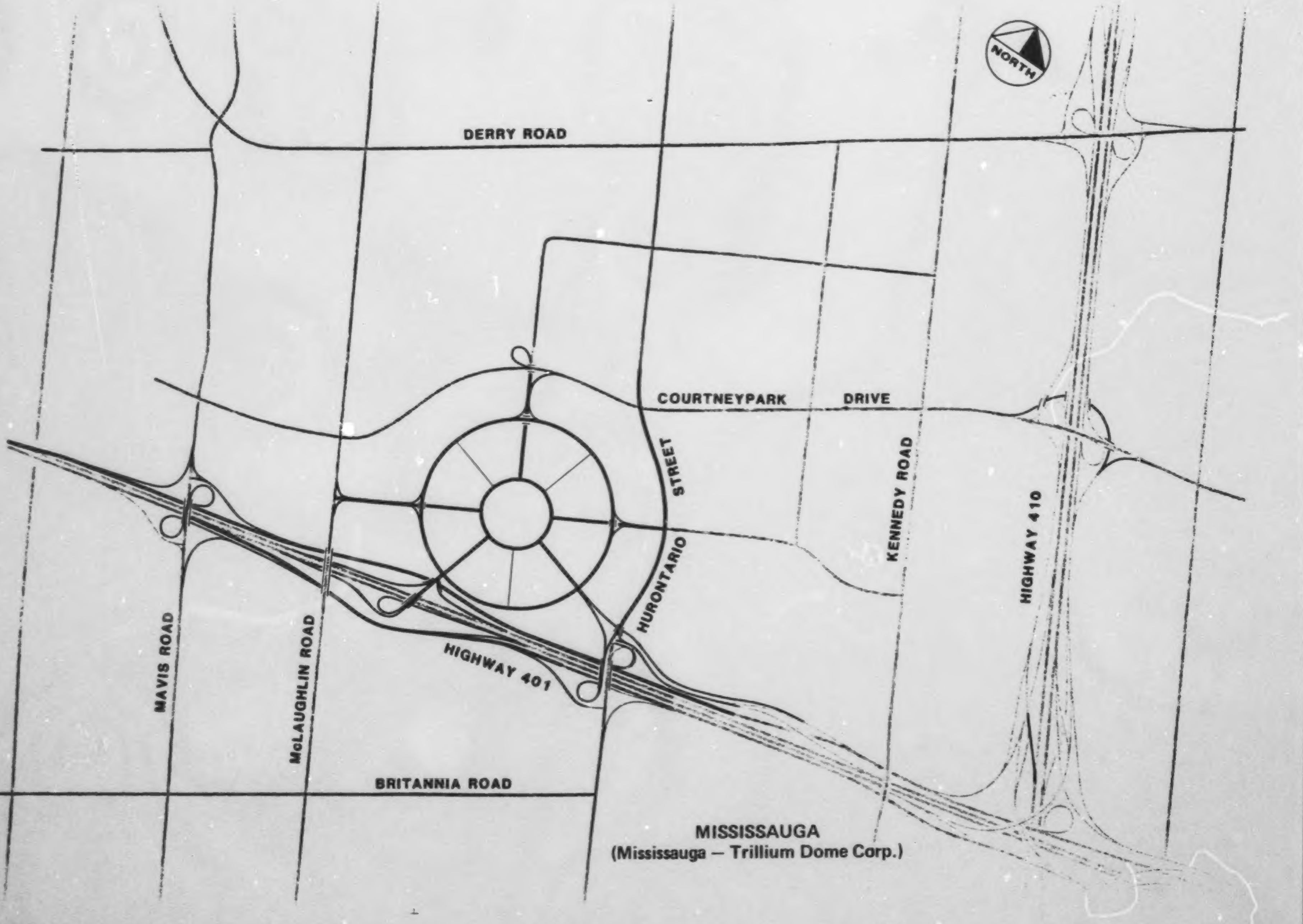
Stadium and Related Facilities (if described):

Hotels, offices, restaurants, conference facilities, retailing stores and recreation facilities plus associated commercial, residential and industrial development.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

Also see Appendix VI for details on the financial component of the Trillium Dome Corporation proposal.



MISSISSAUGA
(Mississauga — Trillium Dome Corp.)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Airport South (York Hannover)

Site Location*: Hwy 401 and Eglinton Ave.

Proposer(s): G.N. Kendrick
Senior Vice-President
York-Hanover Developments Ltd.
Suite 910, Box 442
2 First Canadian Place
Toronto, Ont.
M5X 1E4
(416) 864-0164

Relationship of Proposer to Location: Owner

Size of Site: Not stated

Current Ownership of Land (if different from proposer):

Transportation Access and Parking Provisions (Current or future):

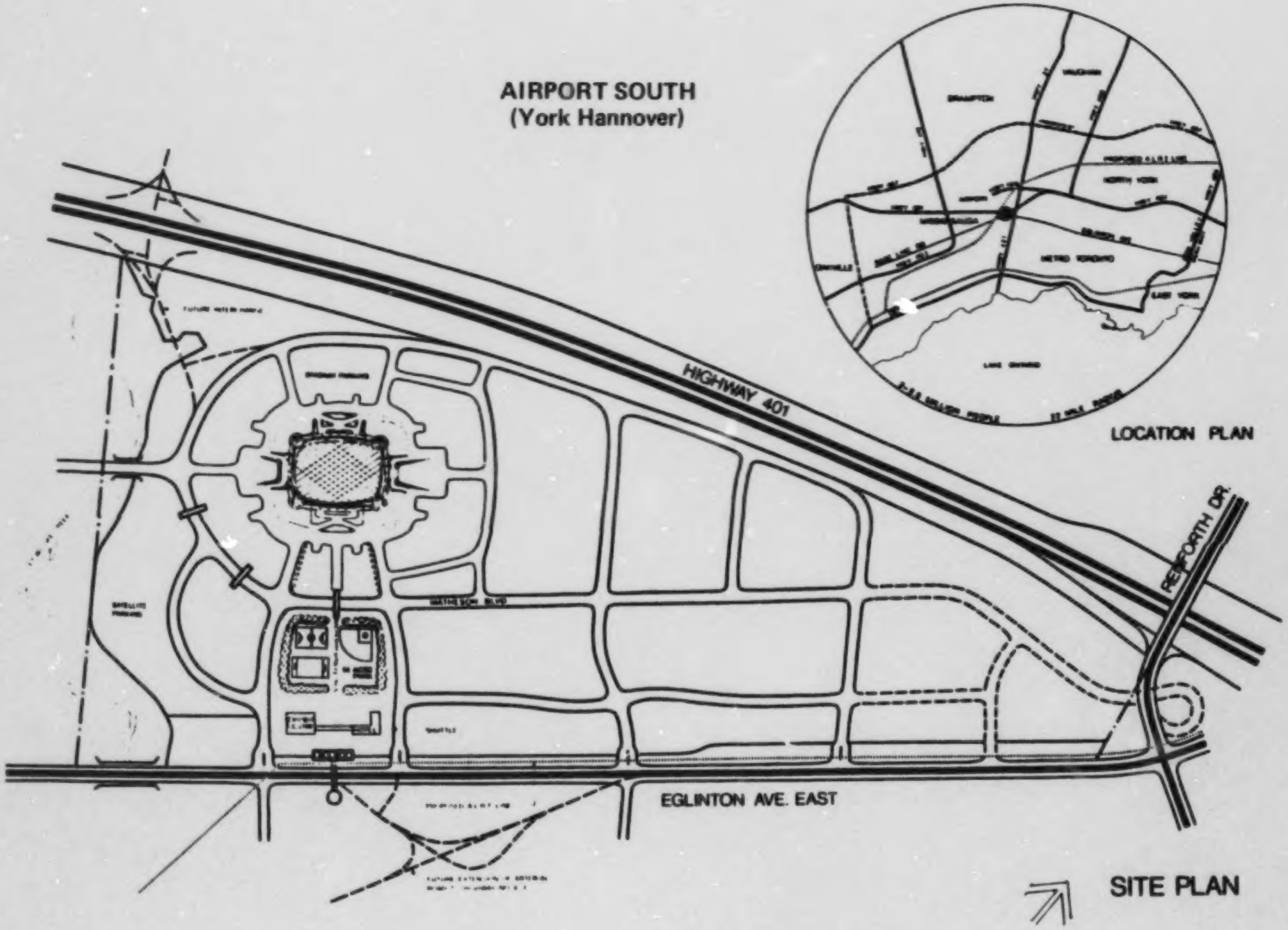
Access via Hwy 401, Eglinton Ave., Hwy 427, and proposed GO ALRT.

Stadium and Related Facilities (if described):

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

AIRPORT SOUTH
(York Hannover)



LOCATION PLAN

SITE PLAN

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Woodbine

Site Location*: Hwy 427, north of Hwy 409, at Rexdale Blvd.

Proposer(s): J.H. Kenney
President
The Ontario Jockey Club
P.O. Box 156
Rexdale, Ontario
M9W 5L2
(416) 675-6110

Relationship of Proposer to Location: Owner

Size of Site: 140 Acres

Current Ownership of Land: Owner

Transportation Access and Parking Provisions (Current or future):

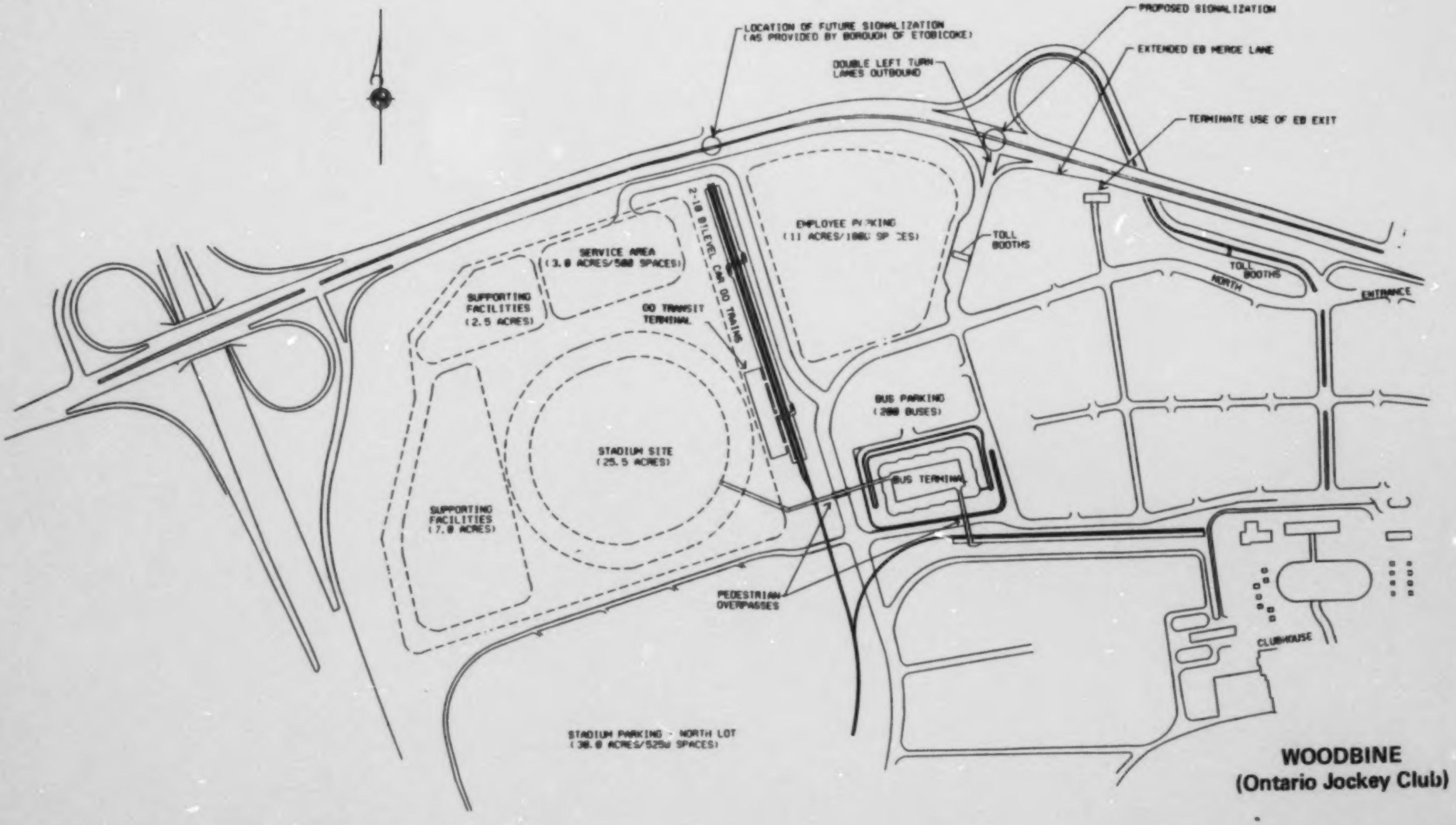
Access Available by Hwy 427, Hwy 27, Rexdale Blvd. and Go-Trains and buses
Currently 13,000 Parking Spaces, Will Increase To 25,300 (for both the racetrack and stadium)

Stadium and Related Facilities (if described):

Woodbine Racetrack would be adjacent to stadium site.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map


LOCATION OF FUTURE SIGNALIZATION (AS PROVIDED BY BOROUGH OF ETOBICOKE)
DOUBLE LEFT TURN LANES OUTBOUND
PROPOSED SIGNALIZATION
EXTENDED EB MERGE LANE
TERMINATE USE OF EB EXIT
2-10 BILEVEL CAR GO TRAINS
EMPLOYEE PARKING (11 ACRES/1000 SPACES)
TOLL BOOTHS
TOLL BOOTHS NORTH
ENTRANCE
SERVICE AREA (3.0 ACRES/500 SPACES)
SUPPORTING FACILITIES (2.5 ACRES)
GO TRANSIT TERMINAL
BUS PARKING (200 BUSES)
STADIUM SITE (25.5 ACRES)
BUS TERMINAL
SUPPORTING FACILITIES (7.0 ACRES)
PEDESTRIAN OVERPASSES
CLUBHOUSE
STADIUM PARKING - NORTH LOT (38.0 ACRES/5250 SPACES)
WOODBINE
(Ontario Jockey Club)

ONTARIO JOCKEY CLUB
WOODBINE RACETRACK
CITY OF ETOBICOKE

STADIUM FACILITIES AND TRANSPORTATION TERMINALS
DATE : AUGUST 18, 1985
SCALE
JOB NO [illegible]
MARSHALL MACKLIN MONAGHAN LIMITED

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Six Points

Site Location*: Bloor Street West At Kipling Ave.

Proposer(s): Suggested by Committee Consultant

Relationship of Proposer to Location: N/A

Size of Site: 20 Acres

Current Ownership of Land: Metropolitan Toronto

Transportation Access and Parking Provisions (Current or future):

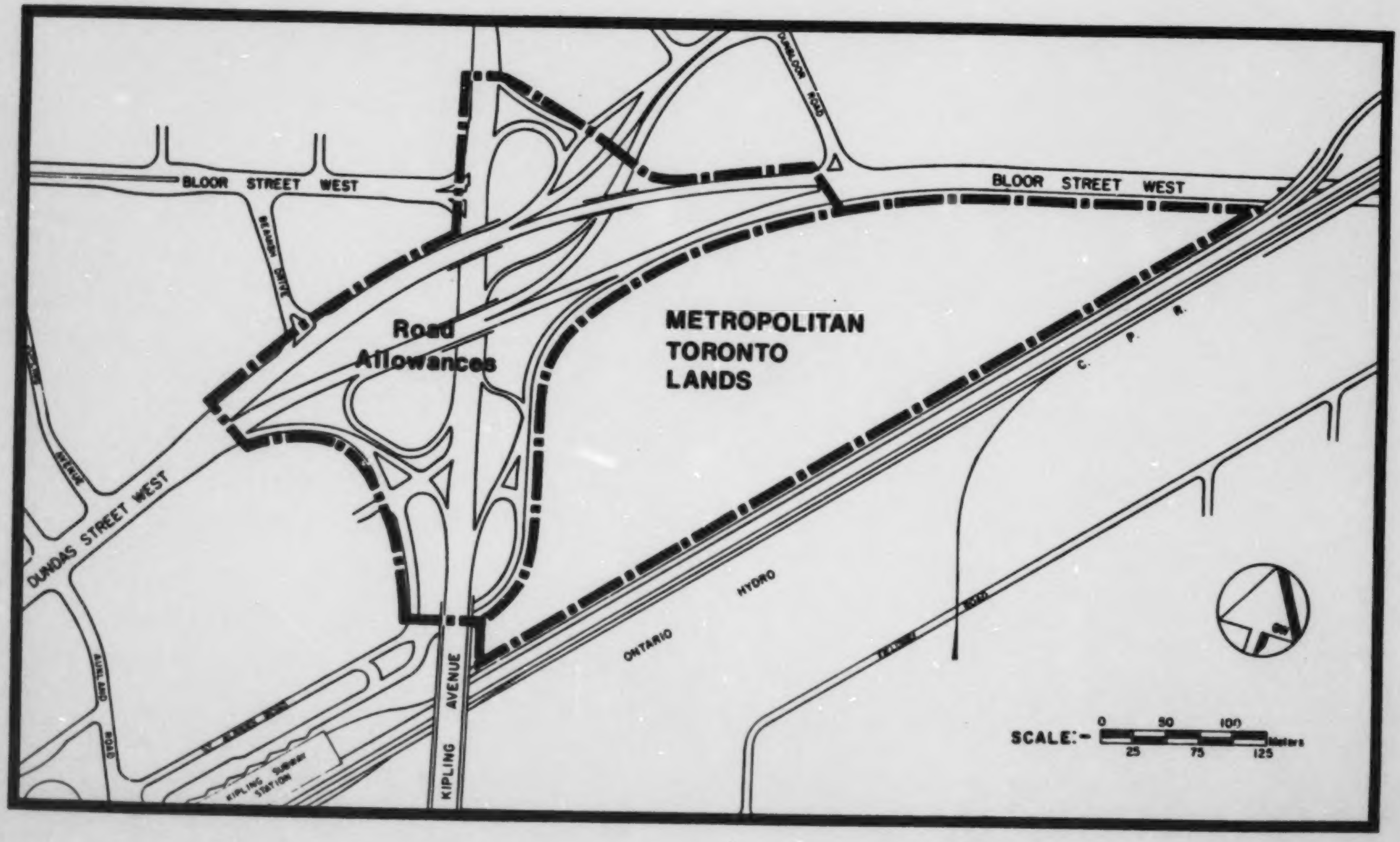
Access Via Bloor Street, Dundas Street, Kipling Ave., Subway, Go-Trains, QEW, Hwy 427 & TTC Bus Routes

Parking For 2,000 Vehicles On Site Plus 9,750 Additional Shared Spaces

Stadium and Related Facilities (if described):

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map


BLOOR STREET WEST
BEAMISH DRIVE
DUNBLOOR ROAD
BLOOR STREET WEST
Road Allowances
METROPOLITAN TORONTO LANDS
C. P. R.
AVENUE
DUNDAS STREET WEST
ONTARIO HYDRO
AUKLAND ROAD
KIPLING AVENUE
KIPLING SUBWAY STATION
SCALE:- 0 25 50 75 100 125 Meters

SIX POINTS

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: York University

Site Location*: Steeles Ave. and Jane St.

Proposer(s): George Bell
External Relations & University Development
York University
4700 Keele St.
Downsview, Ont.
M3J 1P3

Relationship of Proposer to Location: Owner

Size of Site: 30 acres

Current Ownership of Land (if different from proposer):

Transportation Access and Parking Provisions (Current or future):

Access via Hwy 400, Hwy 401, proposed Hwy 407, Steeles Ave., Allen Road and Go-Trains.

2,000 existing spaces with an additional 12,500 in vicinity required

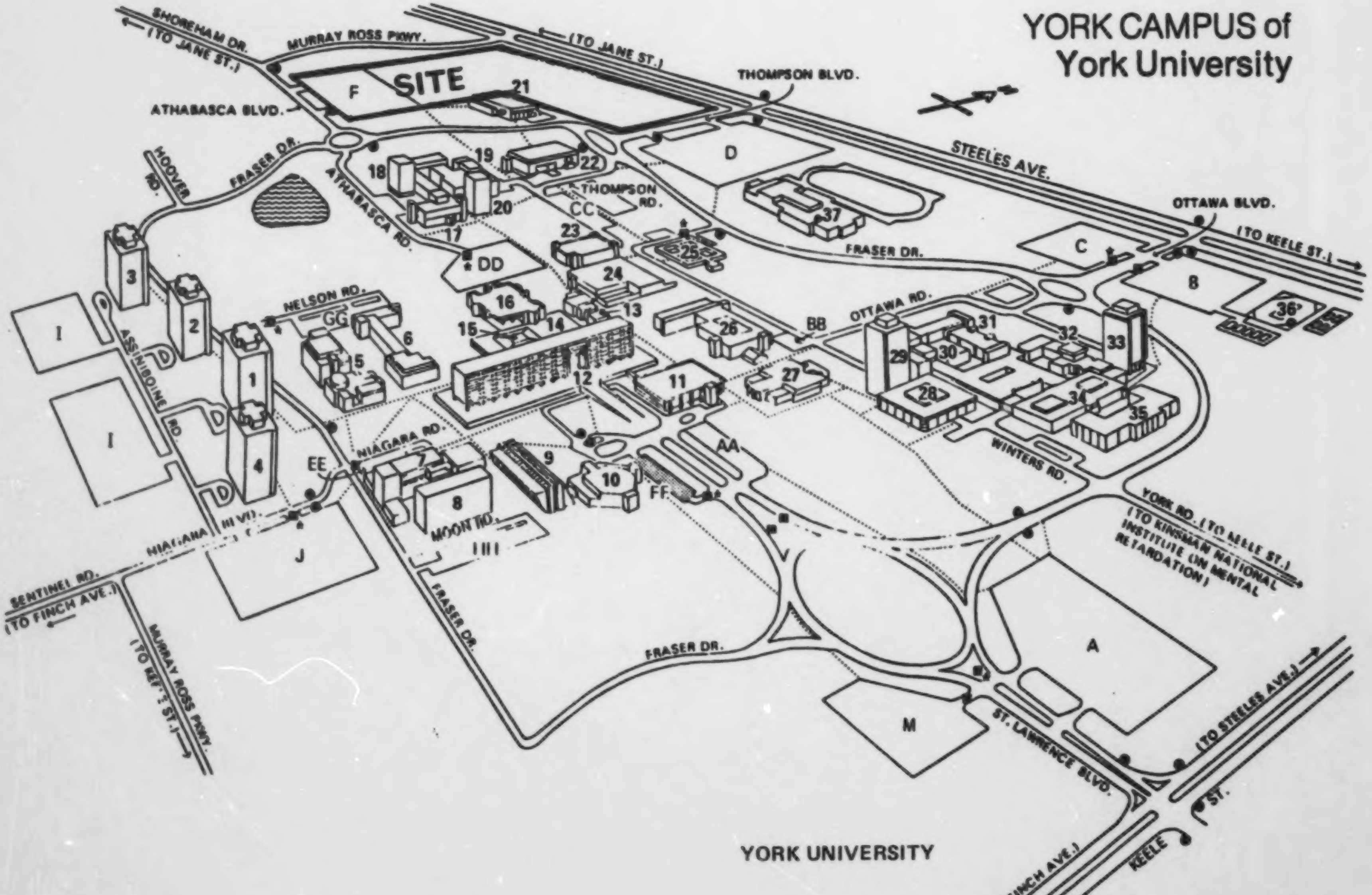
Stadium and Related Facilities (if described):

Additional amateur sport facilities.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

YORK CAMPUS of York University



PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Downsview

Site Location*: Downsview Airfield at Wilson Ave. and Allen Rd.

Proposer(s): No official propment - submissions recommending site by: Michael Copeland, Accumax Consultants, and Maxwell McConnell

Relationship of Proposer to Location: N/A

Size of Site: 80 acres

Current Ownership of Land: Federal Government

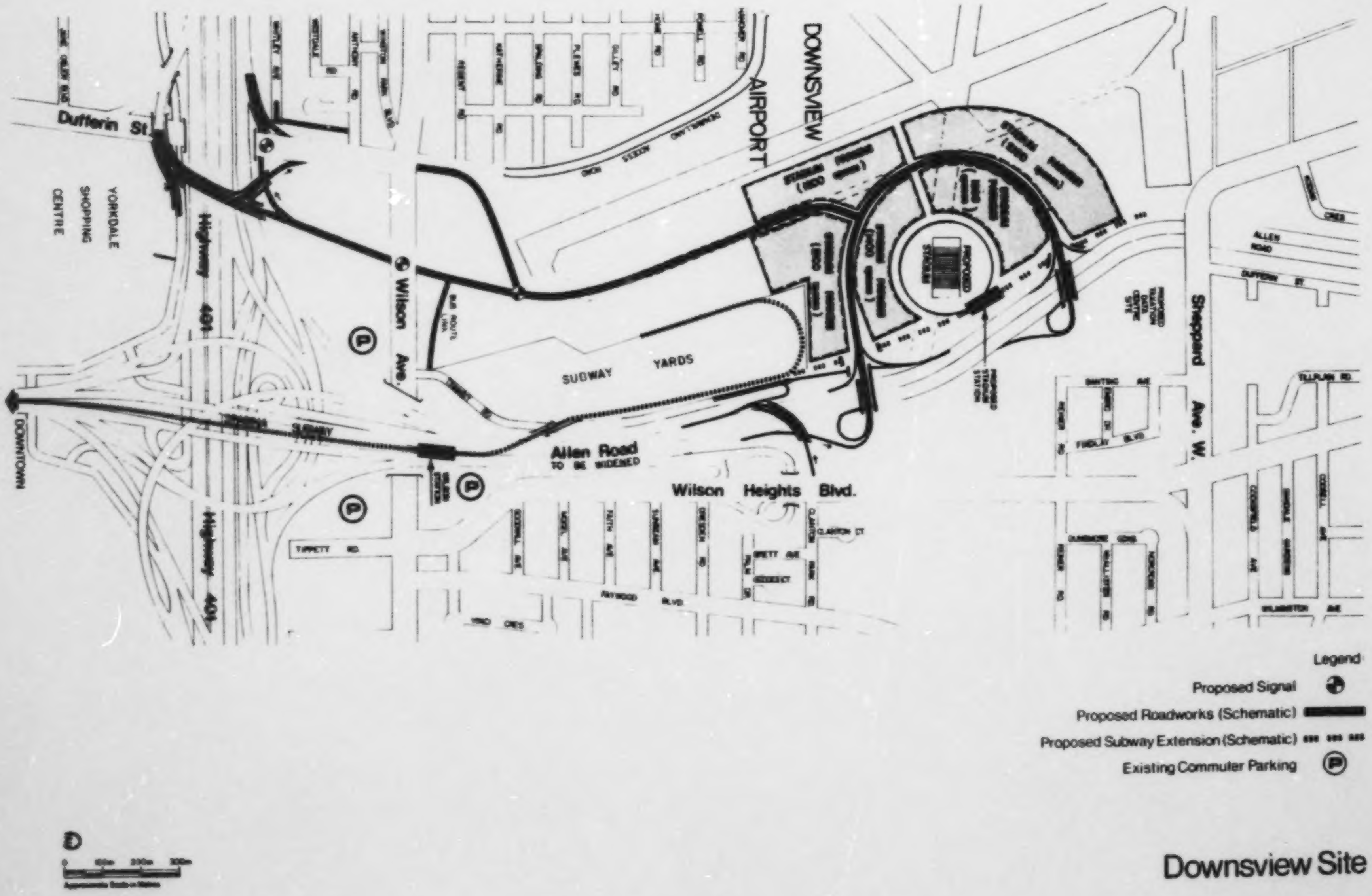
Transportation Access and Parking Provisions (Current or future):

Access by Hwy 401, Allen Expressway, Wilson Ave., proposed Go-Train station and TTC.

Stadium and Related Facilities (if described):

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



Downsview Site

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Richmond Hill (Richmond Hill - York)

Site Location*: Hyw 7 and Yonge St. at proposed Hwy 407.

Proposer(s):

Bob Forhan
Regional Chairman
Regional Municipality of York
62 Bayview Ave., Box 147
Newmarket, Ont.
L3Y 4W9
(416) 895-1231

A. Duffy
Mayor
Town of Richmond Hill
Box 300, 10266 Yonge Street
Richmond Hill, Ontario
L4C 4Y5
(416) 884-8101

Relationship of Proposer to Location: Land is within jurisdiction

Size of Site: 500 acres

Current Ownership of Land: City of Toronto

Transportation Access and Parking Provisions (Current or future):

Access available by Hwy 7, Yonge St., proposed Hwy 407, Hwy 404 and GO-Trains.

15,000 parking spaces (11,500 within 1,500 ft.)

Stadium and Related Facilities (if described):

Suggested additonal facilities include Olympic Training Facilities, a Velodrome, an Olympic Swimming Pool and an equestrian centre.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Richmond Hill (Ontario World Centre)

Site Location*: Hwy 7 and Yonge St. at proposed Hwy 407

Proposer(s): Mr. A.N. Chapman
President
A.N. Chapman Ltd.
200 Consumers Rd.
Willowdale, Ont.
M2J 2R4

Relationship of Proposer to Location: None

Size of Site: 500 acres

Current Ownership of Land (if different from proposer): City of Toronto

Transportation Access and Parking Provisions (Current or future):

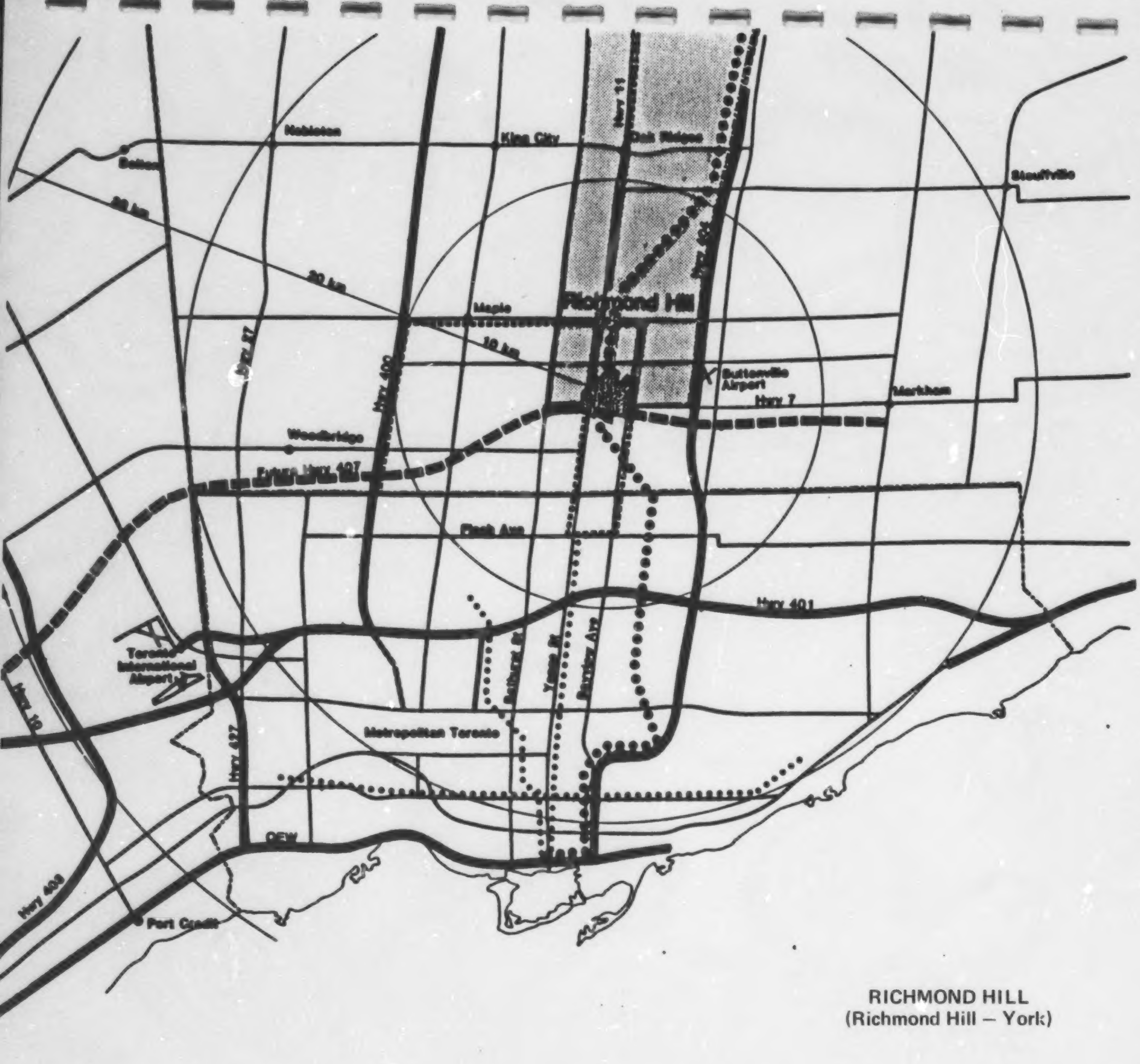
Access by Hwy 7, Yonge St., Proposed Hwy 407, Hwy 404 & GO-Trains
Parking for 8,300 On Site & 7,600 Additional Shared Spaces

Stadium and Related Facilities (if described):

Major ancillary developments proposed including Hockey Arena, Olympic Centre, Racetrack, Grand Prix, Commercial & Industrial Office, Hotels, Residential Area and a Convention-Trade Centre.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



RICHMOND HILL
(Richmond Hill – York)

Stadium Site Proposal

Richmond Hill, Ontario

The Town of
Richmond Hill

LEGEND

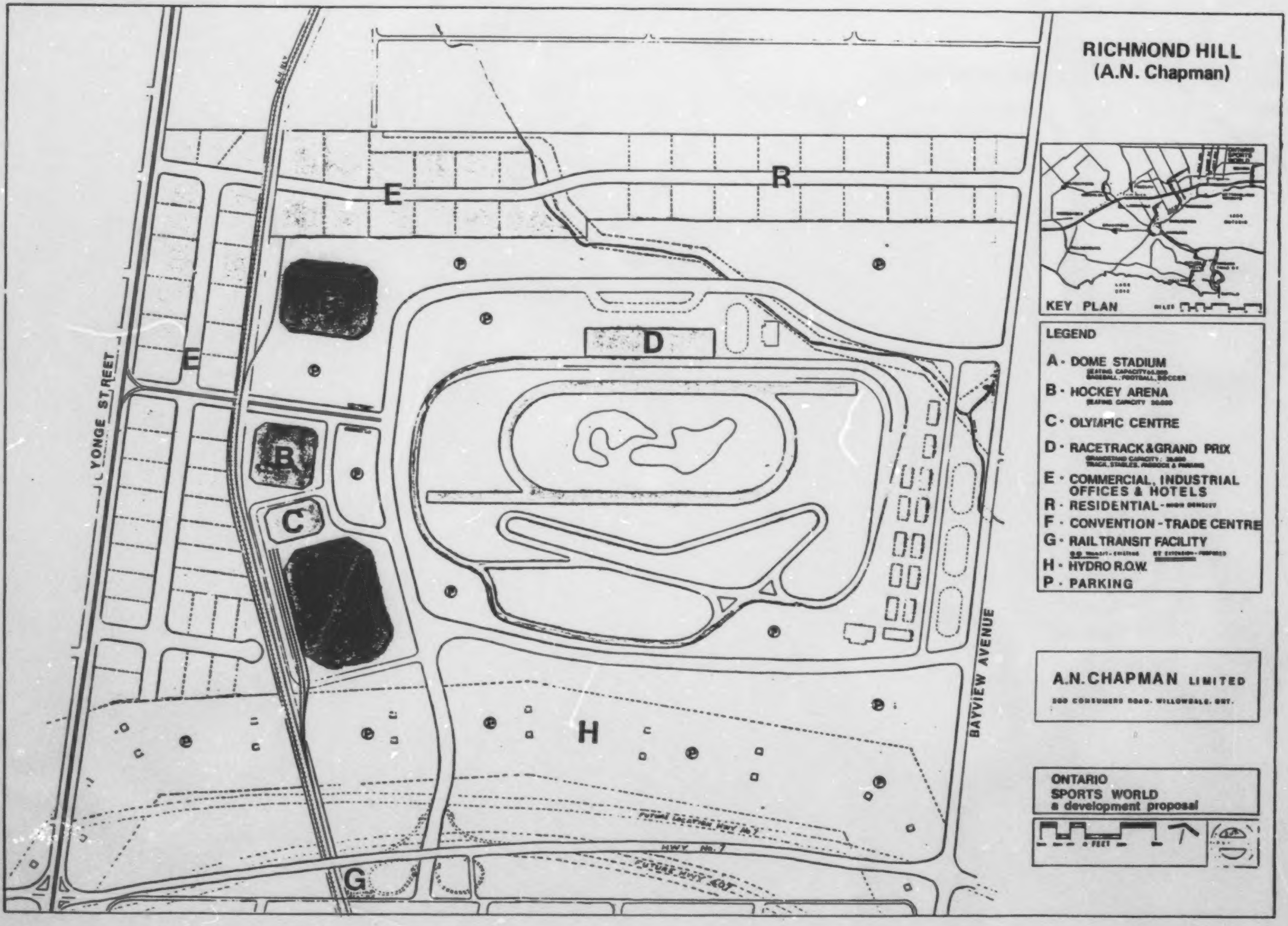
▬	Expressway
—	Highway/Arterial
●●●●	GO Train
•••••	Subway
▪▪▪▪▪	Bus Route
▬ ▪ ▬	Boundary

The Town of Richmond Hill
Planning Department

Joseph Bogdan Associates
Architects/Urban Design Consultants

Regional Transportation
Systems

September 20, 1983



RICHMOND HILL
(A.N. Chapman)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Exhibition Place

Site Location*: Exhibition Place

Proposer(s):

George A. Cohon
Chairman
The Board of Governors of
Exhibition Place
Exhibition Place
Toronto, Ont.
M6K 3C3
(416) 593-7551

Paul Godfrey
Metropolitan Chairman
The Municipality of
Metropolitan Toronto
Office of the Chairman
City Hall, 2nd Floor
Toronto, Ontario
M5H 2N1
(416) 947-8001

Arthur C. Eggleton
Mayor
City of Toronto
City Hall
Toronto, Ontario
(416) 947-7001

Relationship of Proposer to Location: Owner

Size of Site: 10 acres for building

Current Ownership of Land: Metropolitan Toronto

Transportation Access and Parking Provisions (Current or future):

Access by Gardiner Expressway, Lakeshore Blvd., Dufferin St., Go-Trains and TTC.

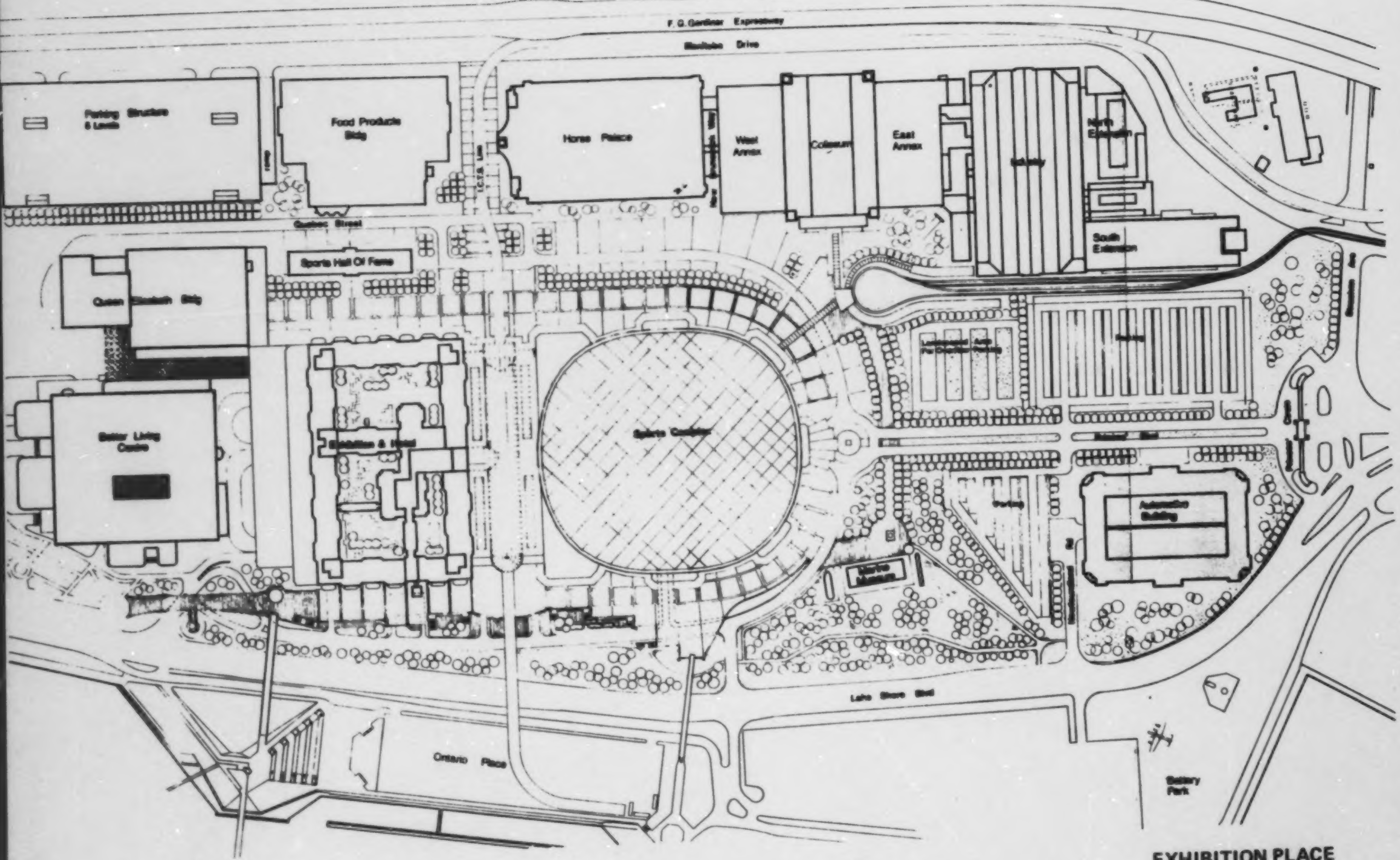
12,700 parking spaces available in or near Exhibition Place.

Stadium and Related Facilities (if described): Trade Centre, Existing Exhibition Facilities and Ontario Place.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

Also see Appendix VI for financial details of the Exhibition Place proposal.



EXHIBITION PLACE
(Toronto – Metro)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Varsity Stadium

Site Location*: Bloor St. West and St. George St.

Proposer(s): James C. Crang
Crang and Boake Architects
85 Moatfield Drive
Don Mills, Ontario
M38 3L6
(416) 448-1203

Relationship of Proposer to Location: None.

Size of Site: 16 acres.

Current Ownership of Land (if different from proposer):
University of Toronto.

Transportation Access and Parking Provisions (Current or future):

Access by Bloor St., Spadina Ave., Subway in 4 directions and Street Car.

Parking for 2,500 vehicles.

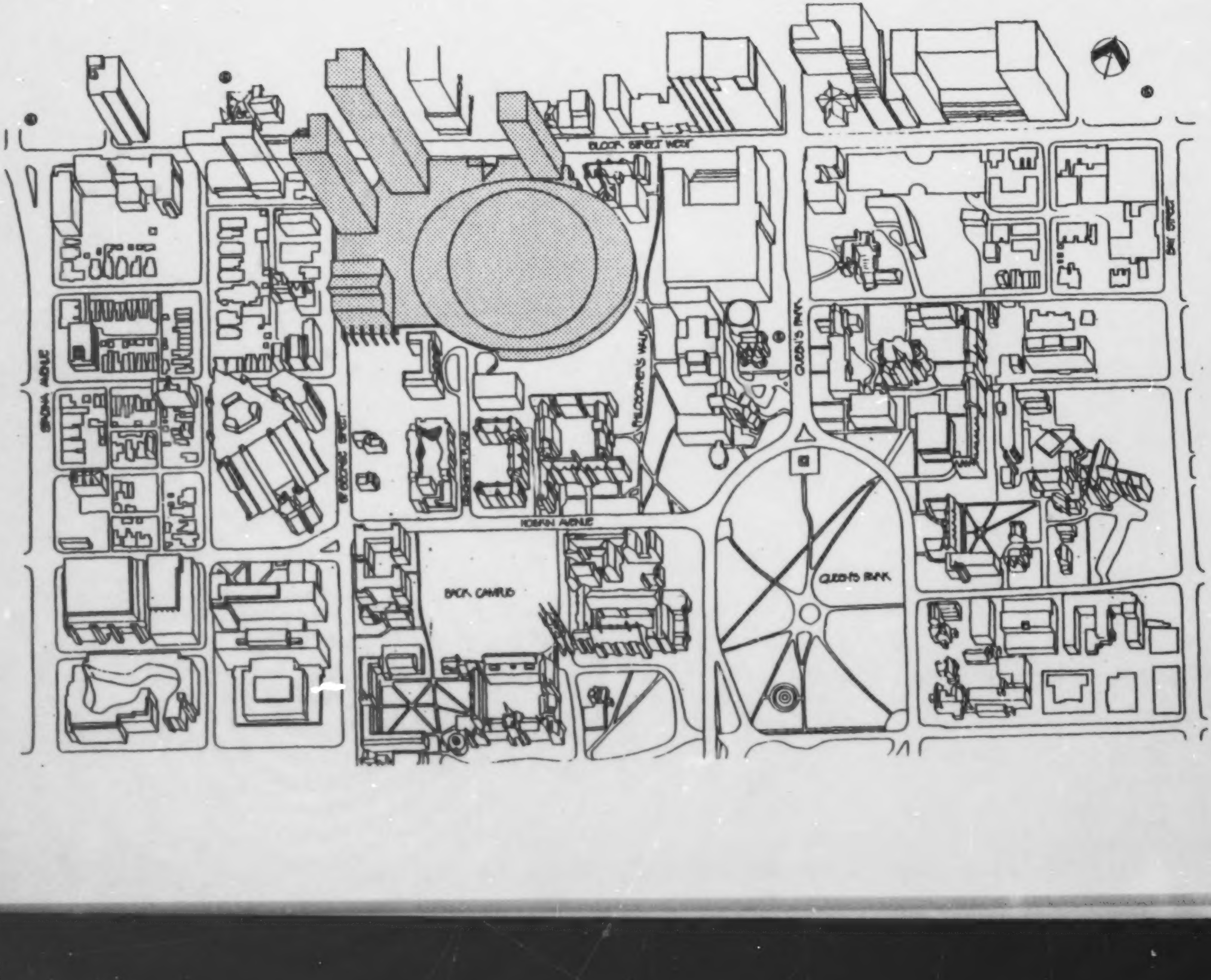
Stadium and Related Facilities (if described):

Hotel, offices and retail stores.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

VARSITY STADIUM
(Crang & Boake)



PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: West Downtown/Railway Lands

Site Location*: Front St. and Spadina - west of the CN Tower.

Proposer(s):
Robbie Architects Planners
Roderick Robbie
Suite 202
111 Merton Street
Toronto, Ont.
M4S 3A7
(416) 488-2382

(NOTE: Several other particular sites in the same area were reviewed on the Committee's initiative)

Relationship of Proposer to Location: None

Size of Site: Not stated

Current Ownership of Land: Many different owners including CN and CP.

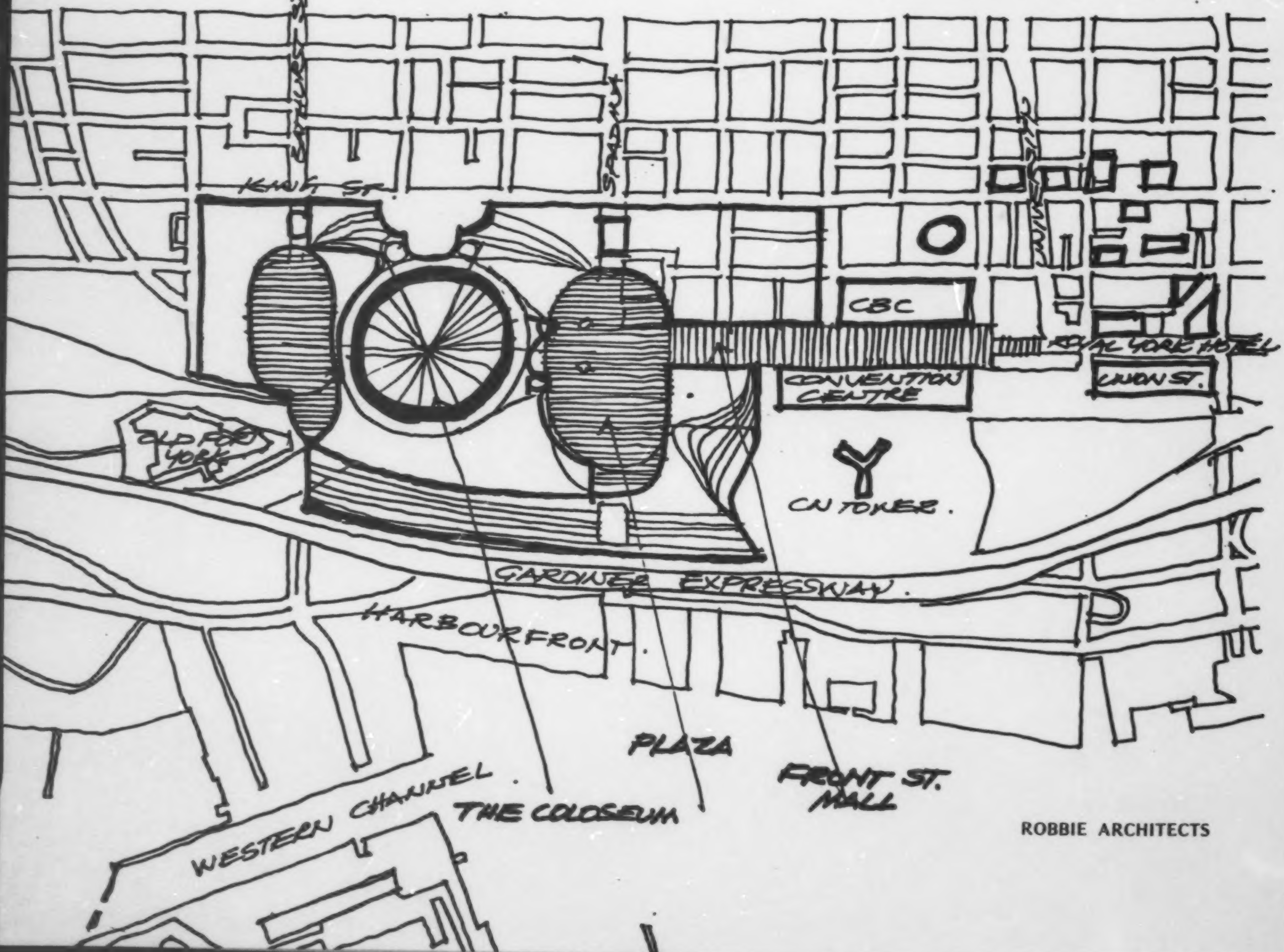
Transportation Access and Parking Provisions (Current or future):

Access by Gardiners Expressway, Front St., Go-Trains, proposed Monorail System, CN Trains and TTC.
Parking Spaces 2,500 On Site and 4,800 Additional Shared (Robbie)

Stadium and Related Facilities (if described):

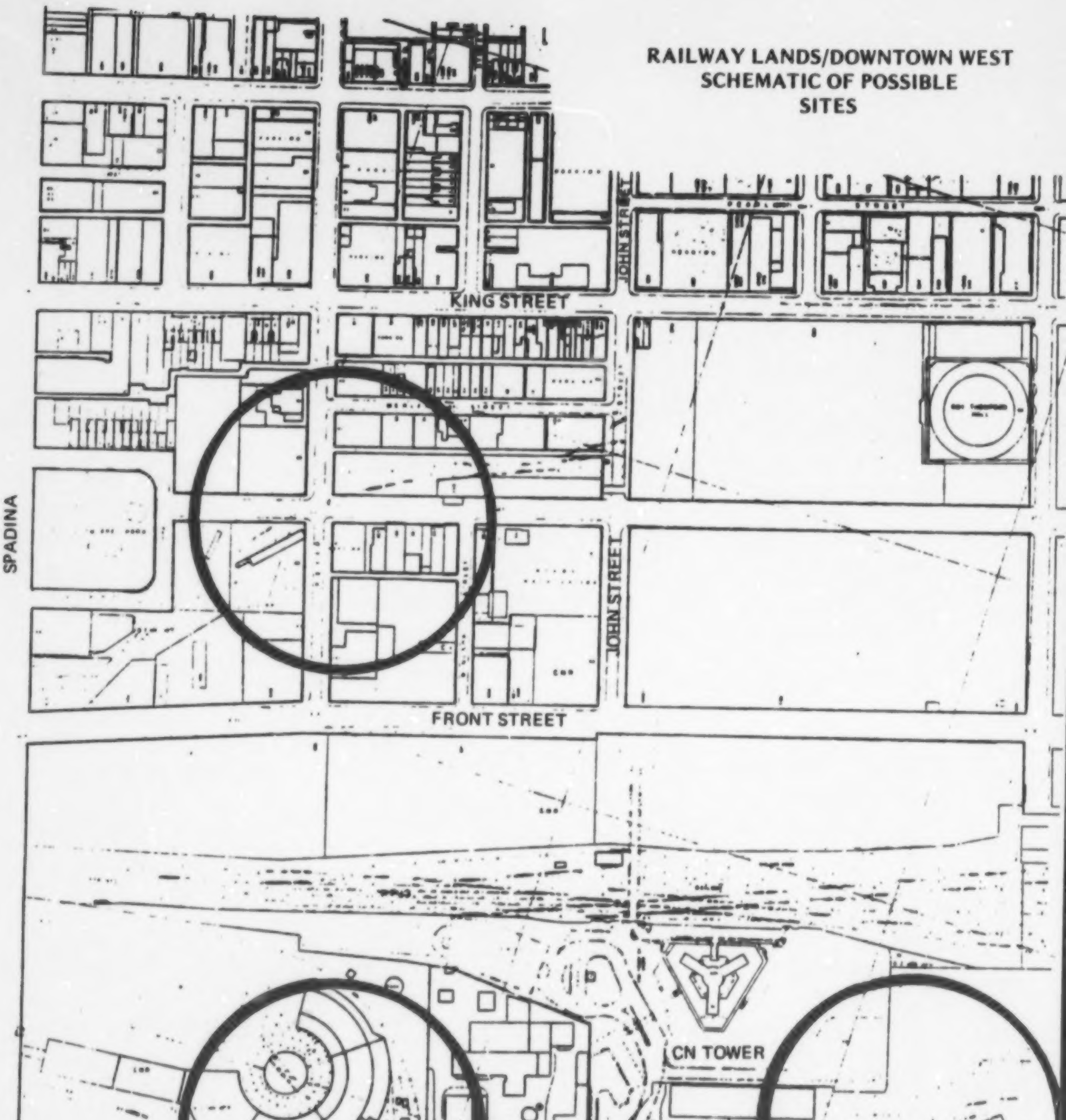
Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



ROBBIE ARCHITECTS

RAILWAY LANDS/DOWNTOWN WEST SCHEMATIC OF POSSIBLE SITES



PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Highways 404 & 7 (Miller)

Site Location*: Woodbine Ave. north of Steeles, at junction of Hwy 404 and proposed Hwy 407.

Proposer(s): L.A. McArthur
President
Miller Paving Limited
P.O. Box 250
Unionville, Ont.
L3R 2V3
(416) 495-6660

Relationship of Proposer to Location: Owner

Size of Site: 300 Acres

Current Ownership of Land: 203 Acres - Miller
78 Acres - Ontario Hydro
22 Acres - Private

Transportation Access and Parking Provisions (Current or future):

Access by Hwy 404, Hwy 7, Woodbine Ave., Steeles Ave., Proposed Go-ALRT, and new Hwy 407.

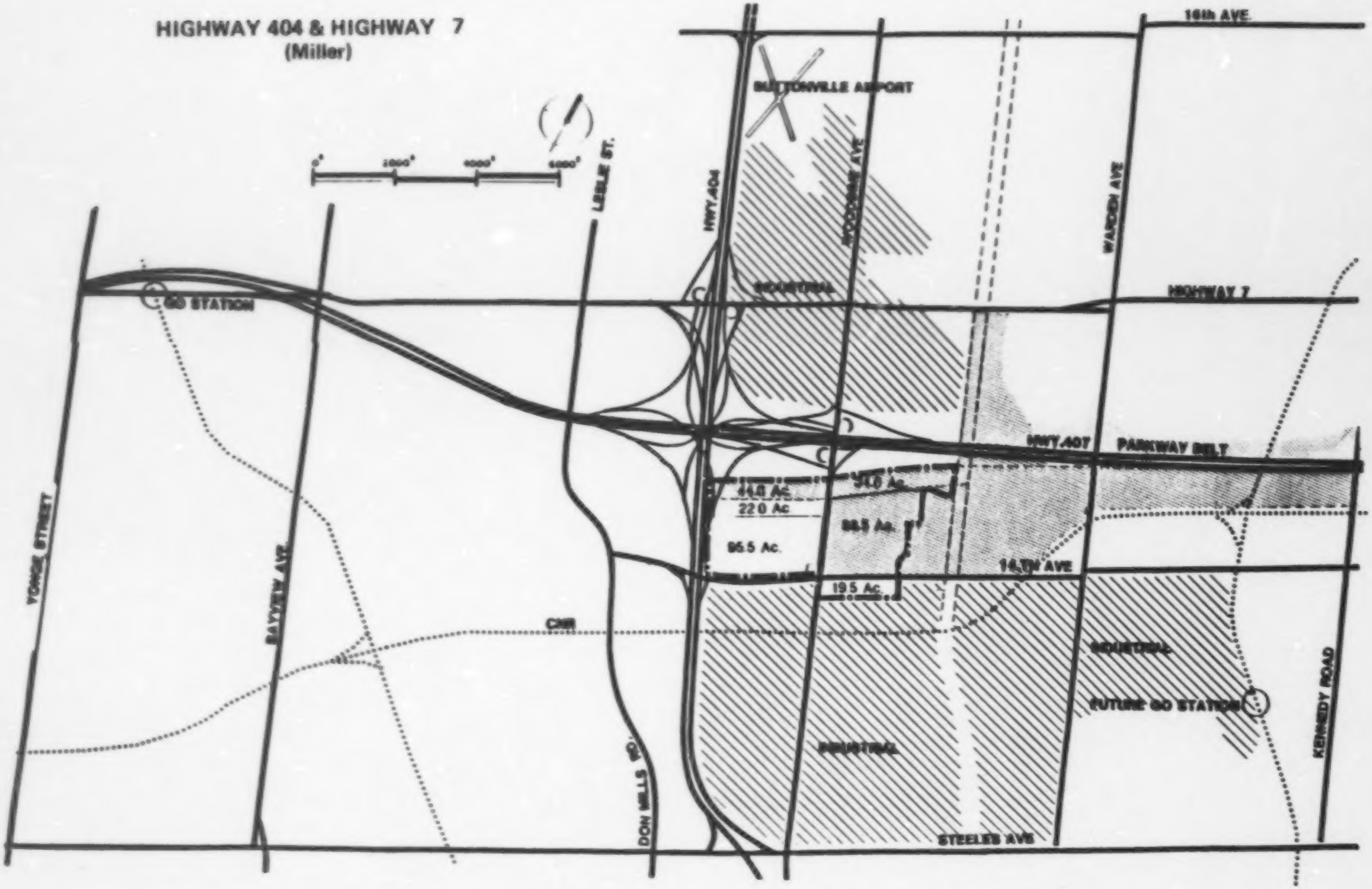
17,700 parking spaces.

Stadium and Related Facilities (if described):

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map

HIGHWAY 404 & HIGHWAY 7
(Miller)



PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Markham

Site Location*: 3 sites on the Little Rouge River between Hwy 7 and Steeles Ave. East

Proposer(s):

Ronald L. Dancey
Regional Councillor
Town of Markham
8911 Woodbine Ave.
Markham, Ont.
L3R 1A1
(416) 477-7000

Bob Forham
Regional Chairman
Regional Municipality of York
62 Bayview Ave., Box 147
Newmarket, Ontario
L3Y 4W9
(416) 895-1231

Relationship of Proposer to Location: Within juristiction

Size of Site: 500 acres.

Current Ownership of Land (if different from proposer):

Province of Ontario.

Transportation Access and Parking Provisions (Current or future):

Access via Hwy 401, Steeles Ave., Hwy 7, proposed Hwy 407, Go-Trains, and future GO ALRT.

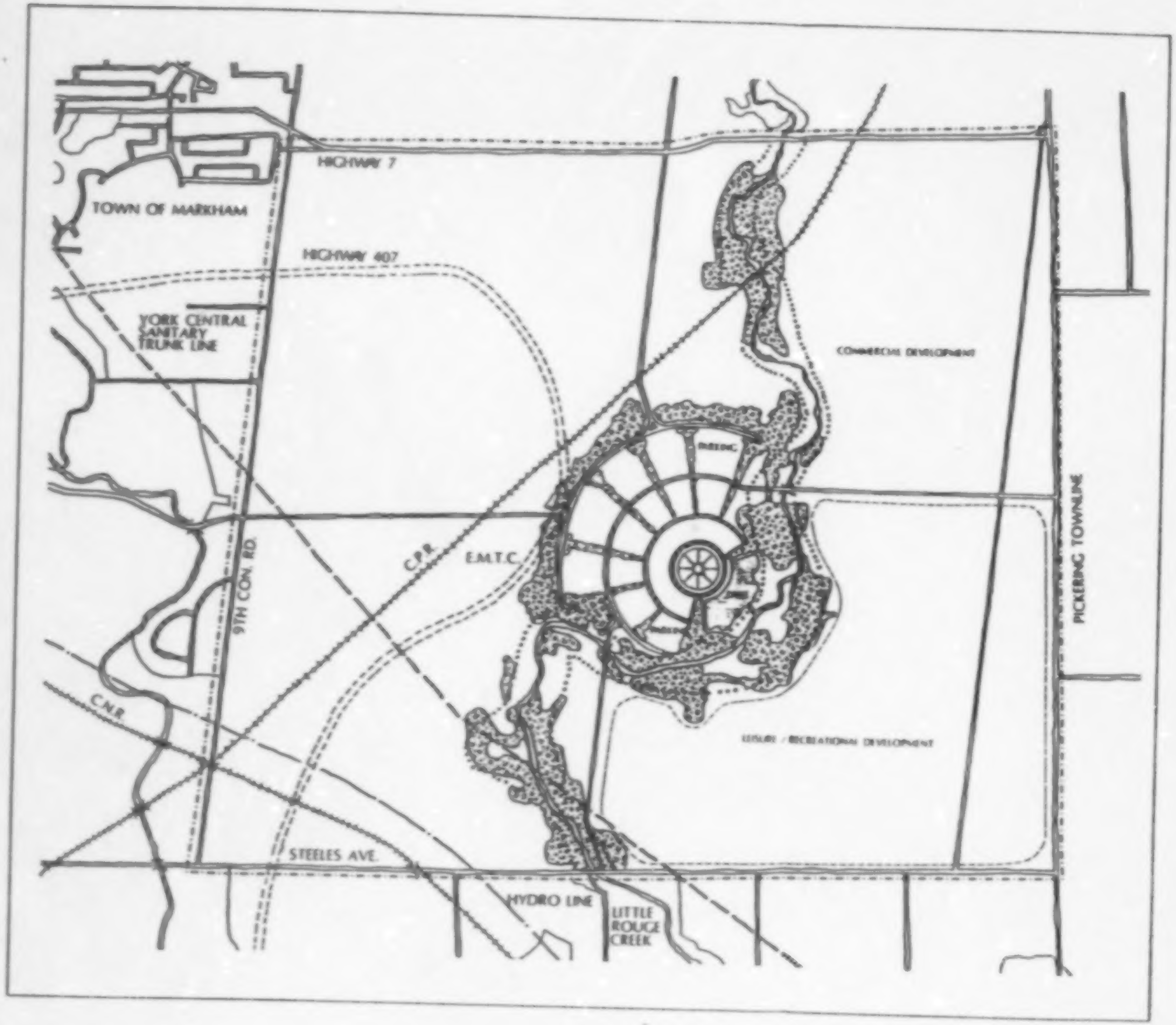
Stadium and Related Facilities (if described):

Hotels, offices, retail facilities, restaurants, residential.

Exhibition Spaces, Sports, Medicine Clinic & Swimming Pool/ Leisure Centre.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



COVERED STADIUM

MARKHAM, ONTARIO

SITE A

THE MOFFAT KINOSHITA PARTNERSHIP
ARCHITECTS AND PLANNERS

MARKHAM
(Markham – York)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Pickering (Durham)

Site Location*: Whites Road North Of Hwy 401
On Dufferin's Creek

Proposer(s): Gary Herrema
Regional Chairman
Regional Municipality Of Durham
P.O. Box 623
Whitby, Ontario
L1N 6A3
(416) 668-7711

Relationship of Proposer to Location: Within Jurisdiction

Size of Site: Not stated

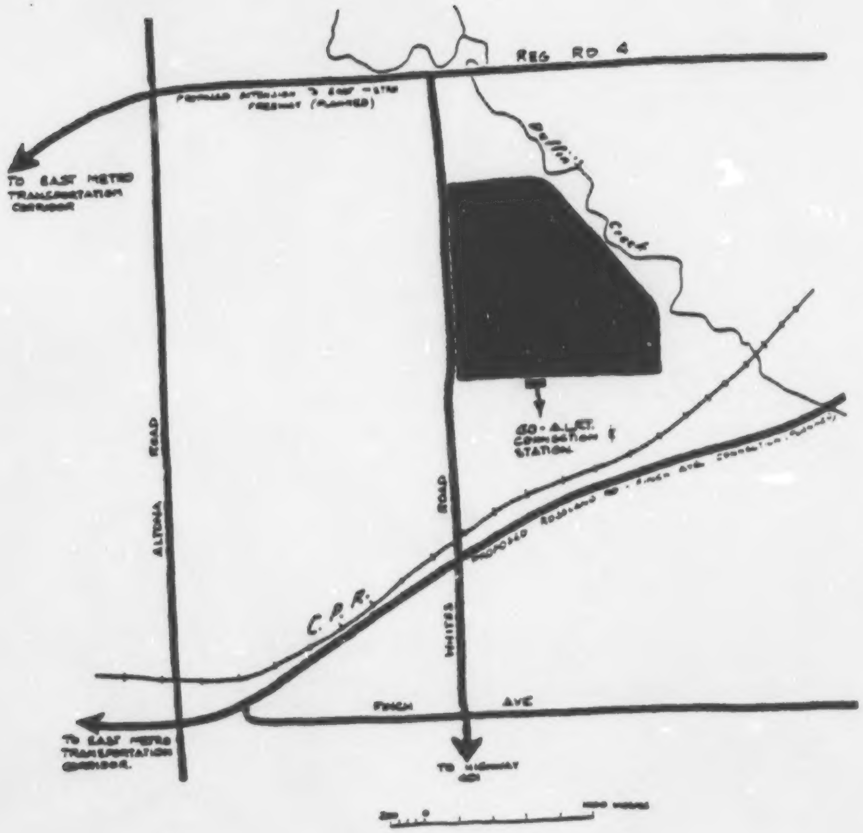
Current Ownership of Land: Province Of Ontario

Transportation Access and Parking Provisions (Current or future):

Access Via Hwy 401, Whites Road, Go-Trains, proposed Go-ALRT, Regional Road 4, and Finch Ave.

Stadium and Related Facilities (if described):

* See Attached map


REG RD 4
PROPOSED EXTENSION TO EAST METRO FREEWAY (PLANNED)
TO EAST METRO TRANSPORTATION CORRIDOR
Duffin's Creek
GO-ALRT CONNECTION & STATION
ALTONA ROAD
WHITES ROAD
PROPOSED ROSSLAND RD - FINCH AVE CONNECTION (PLANNED)
C.P.R.
FINCH AVE
TO EAST METRO TRANSPORTATION CORRIDOR.
TO HIGHWAY 401

PICKERING
(Durham)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Ajax (Durham)

Site Location*: South Of Hwy 401 And West Of Regional Road 23

Proposer(s): Gary Herrema
Regional Chairman
Regional Municipality Of Durham
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3
(416) 668-7711

Relationship of Proposer to Location: Within Jurisdiction

Size of Site: Not stated

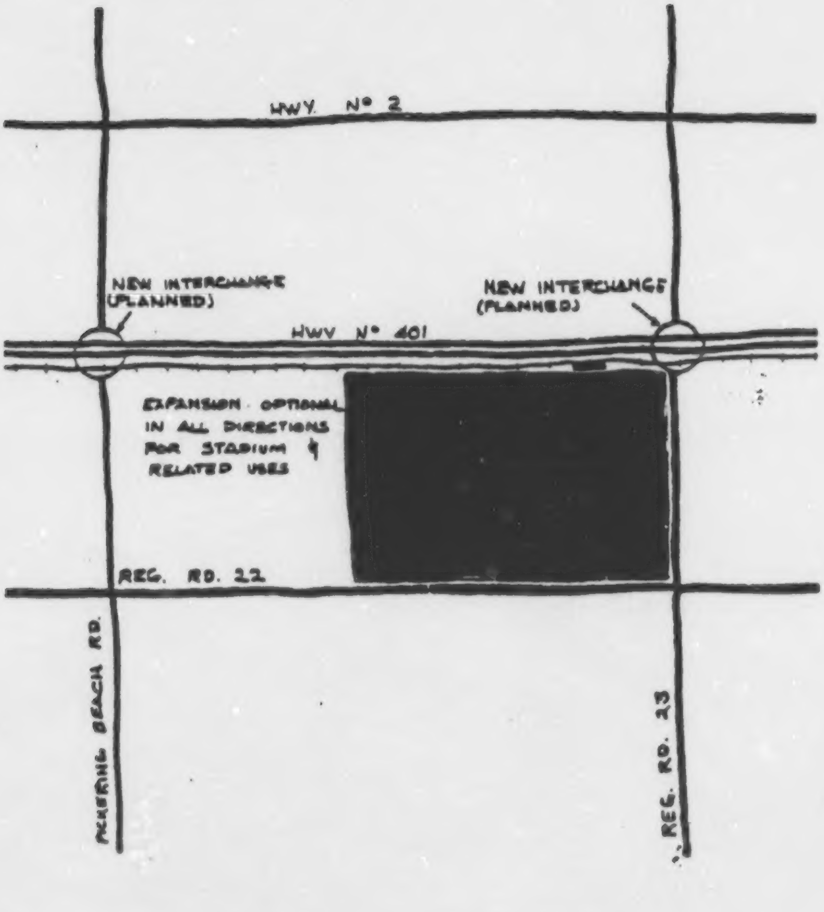
Current Ownership of Land (if different from proposer): Privately Owned

Transportation Access and Parking Provisions (Current or future):

Access By Hwy 401, Go-Trains, proposed Go-ALRT, Hwy #2 And Regional Road 23.

Stadium and Related Facilities (if described):

* See attached map


HWY. N° 2
NEW INTERCHANGE (PLANNED)
NEW INTERCHANGE (PLANNED)
HWY N° 401
EXPANSION OPTIONAL IN ALL DIRECTIONS FOR STADIUM & RELATED USES
REG. RD. 22
PICKERING BEACH RD.
REG. RD. 23
200 0
1000 METRES

AJAX
(Durham)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Whitby

Site Location*: Iroquois Park

Proposer(s):		
	R.A. Attersley Mayor Town of Whitby Municipal Building 575 Rossland Rd. E. Whitby, Ont. L1N 2M8 (416) 668-5803	Garry Herrema Regional Chairman The Regional Municipality of Durham 605 Rossland Rd. East P.O. Box 623 Whitby, Ontario L1N 6A3 (416) 668-7711

Relationship of Proposer to Location: Within juristiction.

Size of Site: 320 acres.

Current Ownership of Land (if different from proposer):
270 acres owned by the Province of Ontario and the remainder private ownership.

Transportation Access and Parking Provisions (Current or future):

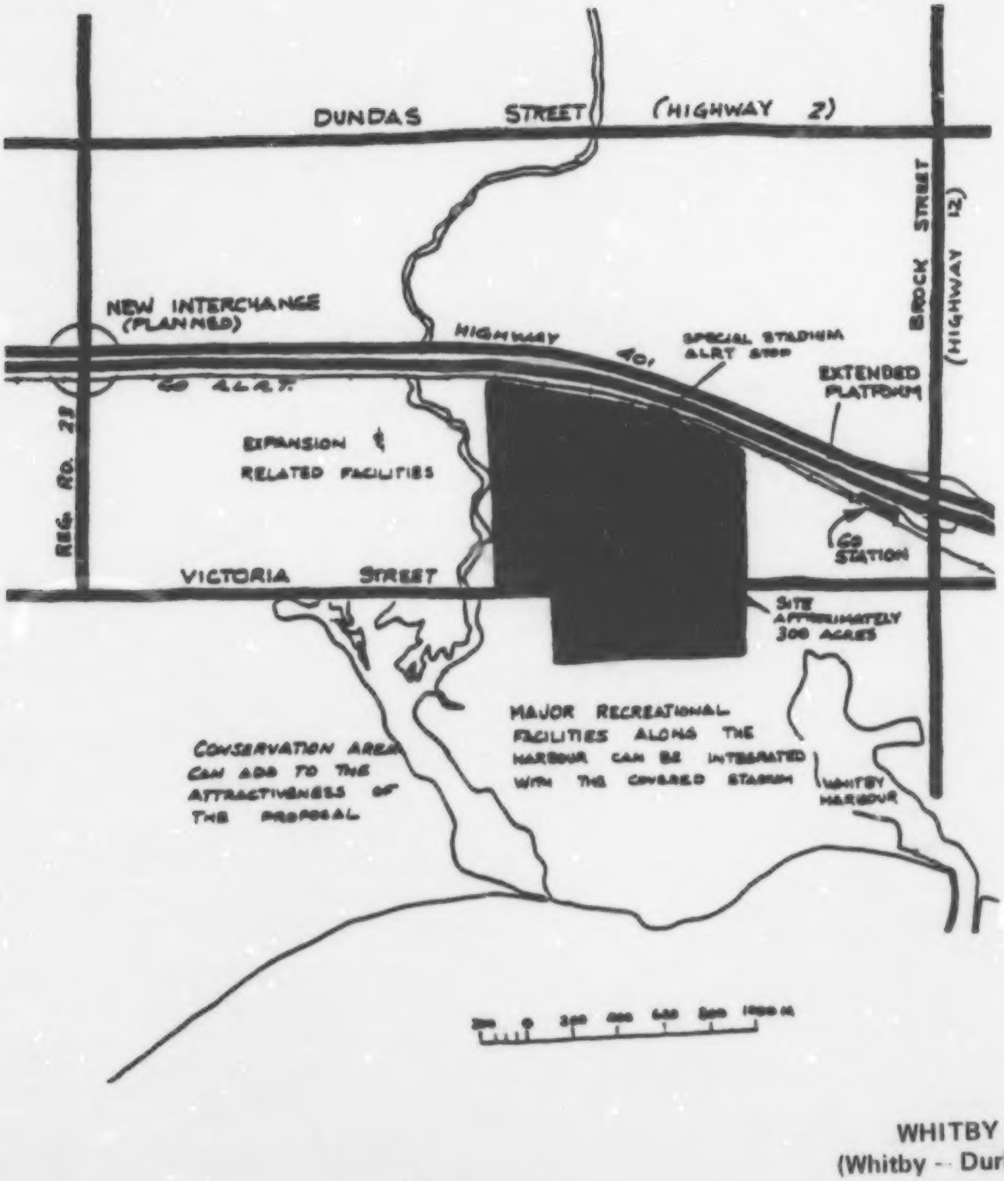
Access by Hwy 401, Victoria St., Go-Trains, and Future GO ALRT.

On Site Parking for 20,000 Vehicles.

Stadium and Related Facilities (if described): Racetrack.

Note: For a detailed transportation description and analysis, see Appendix III.

* See attached map



WHITBY
(Whitby -- Durham)

PROFILE OF SELECTED LOCATION PROPOSALS

Reference Name: Oshawa

Site Location*: Stevenson Rd. South of Hwy 401 On The Lakeshore

Proposer(s):

Gary Herrema
Regional Chairman
Regional Municipality
Of Durham
605 Rossland Road East
P.O. Box 623
Whitby, Ontario
L1N 6A3
(416) 668-7711

Allan C. Pilkey
Mayor
City of Oshawa
Civic Administration Complex
50 Centre St. S.
Oshawa, Ontario
L1H 3Z7
(416) 725-7351

Relationship of Proposer to Location: Within Jurisdiction

Size of Site: 300 Acres - Durham Proposal
108 Acres - Oshawa Proposal

Current Ownership of Land (if different from proposer):

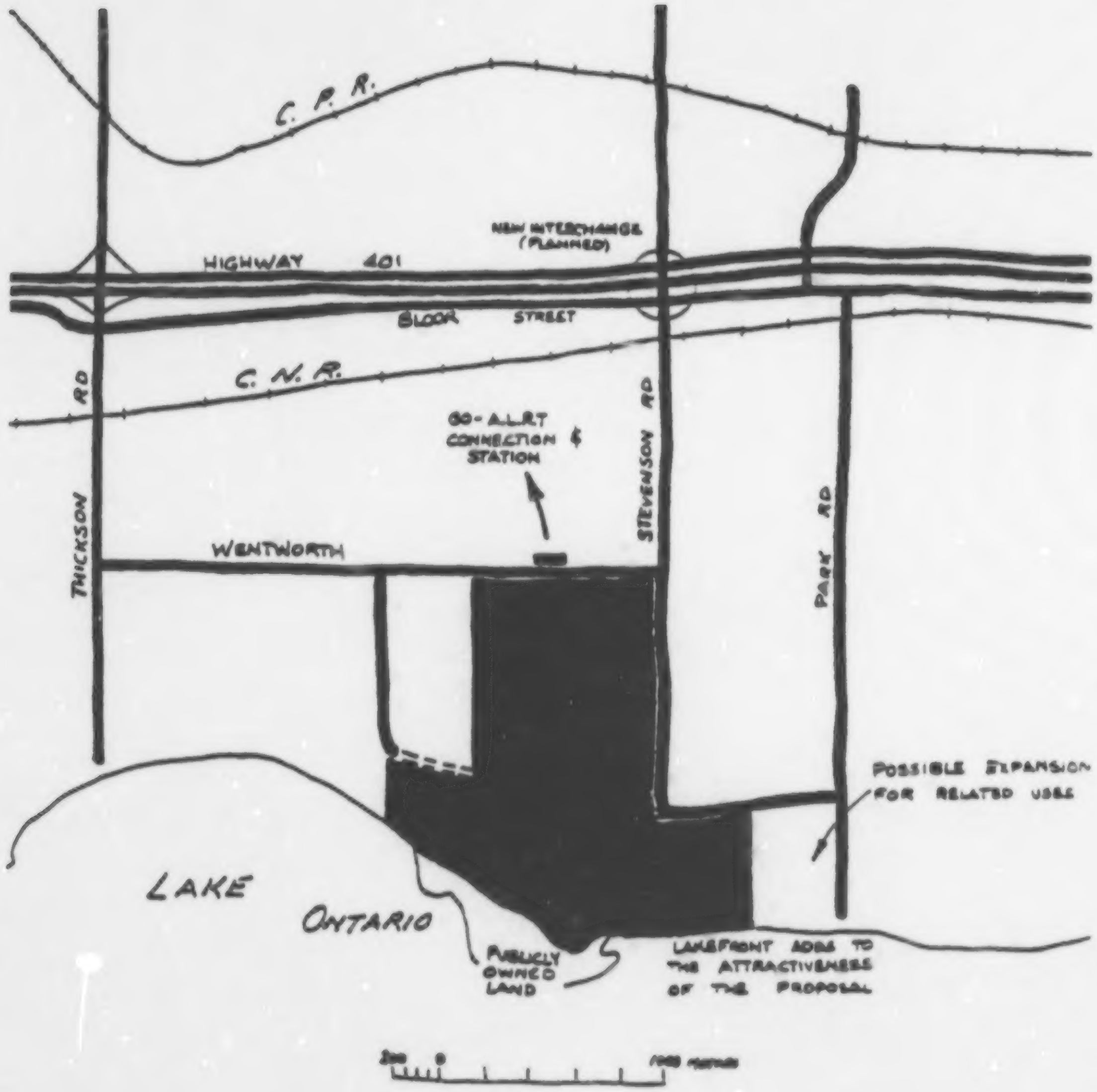
Provincial Government

Transportation Access and Parking Provisions (Current or future):

Access Via Hwy 401, Stevenson Rd., Go-Trains and Proposed Go-ALRT

Stadium and Related Facilities (if described):

* See attached map


C. P. R.
NEW INTERCHANGE (PLANNED)
HIGHWAY 401
BLOOR STREET
C. N. R.
THICKSON RD
STEVENSON RD
PARK RD
GO-A.L.R.T CONNECTION & STATION
WENTWORTH
POSSIBLE EXPANSION FOR RELATED USES
LAKE ONTARIO
PUBLICLY OWNED LAND
LAKEFRONT ADDS TO THE ATTRACTIVENESS OF THE PROPOSAL
200
0
1000 metres

OSHAWA
(Durham)

STADIUM STUDY COMMITTEE REPORT

APPENDIX II Part ii

LIST OF OTHER PROPOSALS AND PROPONENTS

MAP A KEY	SITE PROPOSED	PROPONENTS
(1)	Milton	Daman Malik
(4)	Dixie Road	Philip E. Band, Q.C.
(9)	Canada's Wonderland	Committee
(10)	Highways 400 & 401	John H. Ross
(12)	Keele St. & St. Clair Ave West	Peter Simone
(13)	Floating Stadium	R.L. Hubler Jr.
(15)	Lamport Stadium	Mrs. A.H. Eyres
(22)	Toronto Islands	Phil G.E. Ayerhart
(23)	Don Valley	A.S.R. Cole and Andre Dempsey
(24)	Commissioners Street	Eli Ophek
(26)	Greenwood	Committee
(27)	*Highways 48 & 47	Lennox Real Estate
(29)	Pickering Airport	Committee
(34)	Bowmanville	Maurice Prout

* Submission was withdrawn during review process

STADIUM STUDY COMMITTEE REPORT

APPENDIX III

DETAILED TRANSPORTATION EVALUATION OF SELECTED LOCATIONS

TECHNICAL REPORT TO THE MACAULAY STADIUM COMMITTEE
TRANSPORTATION IMPACT AND INFRASTRUCTURE REQUIREMENTS
relating to
FOURTEEN ALTERNATIVE STADIUM SITES

Barton-Aschman Associates Limited,
January 2, 1984.

INTRODUCTION

Initially, in excess of thirty sites were proposed to the Committee. Based upon the outcome of lengthy discussions and working sessions with the Committee, representatives of Woods Gordon, and other consultants, the original list was reduced to fourteen alternatives. These are dealt with in the maps and data sheets that follow.

	SITE (Alphabetical Order)	PROPONENT(S)	SITE NUMBERS ON MAP "A"
1.	**AIRPORT SOUTH**	York-Hannover Ltd.	6
2.	**DOWNSVIEW**	Committee and Several Individuals	14
3.	**DOWNTOWN WEST**	Committee	19
4.	**EXHIBITION PLACE**	Metropolitan Toronto and City of Toronto	16
5.	**HALTON**	Region of Halton and Hon. James Snow	2
6.	**HIGHWAYS 404 & 7**	The Miller Group	25
7.	**MARKHAM**	Region of York and Town of Markham	28
8.	**MISSISSAUGA**	City of Mississauga and Trillium Dome Corporation	3
9.	**RICHMOND HILL**	Town of Richmond Hill, Region of York, and A.N. Chapman Ltd.	17
10.	**SIX POINTS**	Committee	8
11.	**VARSITY STADIUM**	Crang & Boake, Architects	18
12.	**WHITBY***	Region of Durham and Town of Whitby	32
13.	**WOODBINE**	Ontario Jockey Club	7
14.	**YORK UNIVERSITY**	York University	11

It should be noted that the individual maps on the following pages indicate the forecast directional distribution of **automobile trips only.** Transit and "other" person-trips listed in the tabulations which are present below each map are dealt with by means of modal split analysis.

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* Analysis results would apply generally to the three other sites proposed by the Region of Durham.

KEY ASSUMPTIONS

- **Market Area Definition/Limits**

The "market area" comprises six **Regions**, including Metropolitan Toronto. The others include: York, Durham, Peel, Halton, and Hamilton-Wentworth. In addition, roughly one-half of the Niagara Region, one half of the Kitchener-Waterloo Region, and one half of Wellington County (largely the City of Guelph) were included.

- Market area population for the year 2000 was the basis of the travel time/distance analysis. The total population of the aforementioned six regions has been estimated as 4.2 million (circa 2000), representing a "conservatively low" growth forecast. Population forecast for other sub-regions considered (Niagara, Kitchener-Waterloo, Guelph) is 0.5 million (Note: this is equivalent to 50 percent of the total population forecast for these places.)
- Total "market area" population forecast: 4.7 million.
- Centrality (within the market area) indices for each site were based upon off-peak conditions on the freeway and arterial road network. Appropriate weighting was applied on a zone basis, in terms of overall distance from the assumed "centroid" of each zone to each site.

- **Directional Orientation (Vehicular Traffic)**

The likely approach /departure patterns of automobiles to/from each site were developed using the aforementioned "weighted" market population distribution. After adjustment for typical transit usage by zone, the resultant effective population distribution formed the basis for assignment of vehicle-trips to the committed road system serving each site.

- **Modal Split**

  Forecasts were based upon the following procedure:

  - Extant survey data relating to stadiums and other large-scale places of assembly in Canada and the United States were examined. Canadian examples included B.C. Place in Vancouver, Empire Stadium in Edmonton, and the CNE Stadium). (Note: Barton-Aschman has been involved in studies relating to numerous stadiums, including -- most recently -- the new domed stadium in Minneapolis.)

  - For each site, **existing** and **committed** major public transportation facilities (subway, GO Rail) were considered, and estimates of proportional use (for each site, and for each of the 50 analysis zones in relation to each site in turn) were made. These estimates were based upon population density statistics and upon extant modal split statistics relating to a wide range of land uses and trip purposes. (Reference: Various Metro Toronto transportation planning studies.)

  - Alternative sites, having been "classified" in terms of quality of high-capacity transit service (in terms of location on the systems, likely headways and capacities) were given a modal split classification.

  - Auto trip volumes were modified in accordancce with the results of the analysis just outlined, for each site.

It should be noted that "peak times" for the stadium will rarely coincide with normal "commuter" peaks on the road and transit systems. Therefore, modal splits are not "forced", as it were, to "favour" transit. In other words, the proportions are intended to represent "real (potential) conditions" in all cases. In the rare event of a clear overlap of stadium and commuter peaks, (ie. opening Blue Jays game), transit use could increase by ten percent or more. For "central sites" (Varsity, Downtown West, Exhibition Place, etc.), this could be handled by reducing headways and by making other operational modifications (ie., No new capital facilities would be needed, but "special" services might be.) For outer suburban sites, heavier use of charter buses, combined with higher average auto occupancy, would be possible responses to such a situation.

- **Design Flow Conditions**

(a) Typical WEEKDAY Event (ie. baseball)

- Crowd size - 35,000; 90% arrival/100% departure of auto drivers during peak hours; 100% arrival and departure of transit passengers during peak hours.
- Typical arrival peak hour: 6:30 - 7:30 PM
- Typical departure peak hour: 10:00 - 11:00 PM
- Average auto occupancy: 2.75 (including driver)

(b) Typical WEEKEND-DAY Event (ie. CFL football):

- Crowd size - 50,000; 90% arrival/100% departure of auto drivers during peak hours; 100% arrival and departure of transit passengers during peak hours.
- Typical arrival peak hour: 1:00 - 2:00 PM
- Typical departure peak hour: 5:00 - 6:00 PM
- Average auto occupancy: 3.0 (including driver)

Note: It has been assumed that design flows relating to an "absolute peak" crowd of 65,000 (ie. The Grey Cup, The World Series) would not differ markedly from those forecast for a crowd of 50,000. This is because both the use of public transit and average auto occupancy would invariably be higher than for a "normal" event. Assuming a modest five percent increase in transit use*, and a commensurately modest increase in average auto occupancy from 3.0 to 3.2, resulting peak hour auto traffic **increases** would be no higher than 10 percent for any site considered, with most increases being less than five percent. Moreover, if an extension of the "design departure period" from 60 to 75 minutes is assumed, **hourly** volumes would remain virtually identical to those relating to a "normal" 50,000 crowd event.

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* Achievable by means of "special" and charter bus services, shorter rail service headways, etc.

- **Transportation Facility Capacity Guidelines**

These are, for the most part, standards which are normally quoted as preliminary guidelines pursuant to the preparation of **conceptual plans** and **impact analyses.** They are not to be construed as immutable numbers relating to any specific stadium site or transportation facility.

	Facility	Nominal HOURLY CAPACITY[1]
A	**ROADS**	
	• Freeway/Expressway (lane width: 12 ft.)	2,000 veh/lane
	• Arterial/Major Collector (4 lanes, minimum; lane width: 11 - 12 ft.)	750 - 1,200 veh/lane [2]
B.	**TRANSIT**	(See Note 3)
	• Subway	36,000 psgrs./dirn.
	• ICTS/GO-ALRT	20,000 psgrs./dirn.
	• GO Transit (Commuter Rail)	8,000 - 10,000 psgrs./dirn.
C.	**PARKING**	
	• Surface Area (at grade) or Floor Space (structure)	350 - 400 square feet per parking stall (110 - 125 stalls per acre) including aisles and circulation.

NOTES:

1. Roads assumed to be operating at Level of Service D-E during peak periods.
2. - Lower end of range: arterial sections within "tight" signalized grid/network
   - Upper end of range: limited access arterial sections one kilometre or more in length (e.g. Allen Road).
3. Represents highest current level of service; e.g., Lakeshore Line (Oakville-Pickering) at 20-minute headway.

- **Parking**

Parking requirements flowed naturally from the application of the assumptions outlined above, for each alternative site. An allowance of between 200 and 500 stalls for employees was added to the total, with the higher figure being applied to "outer suburban" sites.

- **Infrastructure Requirements**

Major road and transit system capital improvements were identified on the basis of the **difference** between typical residual capacities afforded by key system components (freeways, arterial roads, rail transit) in major transportation corridors on the one hand; and site design hour demands, on the other hand, for each site and for four distinct design periods:

- weekday arrival
- weekday departure
- weekend-day arrival
- weekend-day departure.

Estimates of **residual capacity** were based upon a large number of traffic volume statistics secured from numerous government agencies, and upon traffic flow variation data supplied by the MTC and others relating to freeways and other major transportation system components.

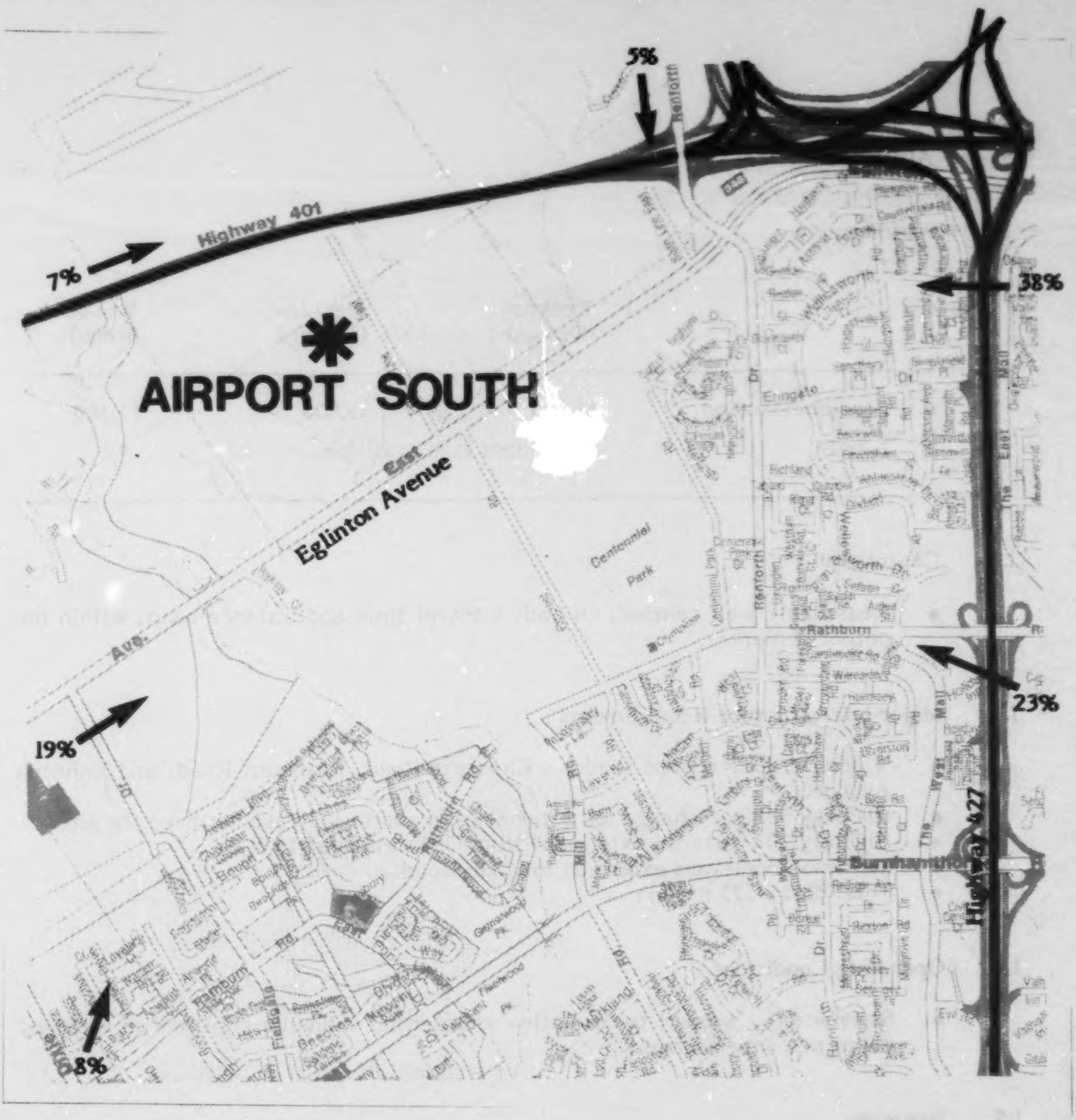
In identifying needs, the relative practicality of alternative system improvements in terms of cost, "ease of implementation", and range of possible alternative users, was assessed, based upon knowledge of local conditions and earlier success (or the lack thereof) in implementing plans of similar magnitude and impact.

- **Cost Estimates Relating to Transportation Infrastructure Requirements**

Cost estimates are best described as "macro-estimates". It has clearly not been possible (to date) to prepare detailed estimates for fourteen separate "packages", relating to property, capital construction, maintenance, and surcharged (transit) service costs. However, Barton-Aschman respectfully submits that such detailed treatment is not warranted **at this juncture**. The key objective of the "macro-cost estimate" is, after all, to develop **comparative** estimates in broad terms, so that certain of the sites can be eliminated from future serious consideration.

- **Effective Date**

Results of all analyses summarized herein are based upon information made available by proponents and others **on or before December 31, 1983.**



BARTON ASCHMAN

Approximate Scale 1:25,000

1. Airport South

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	Typical %	Arrival	Departure	Typical %	Arrival	Departure
Private Autos	90%	10,300	11,500	80%	12,000	13,300
Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit Subway	-	-	-	-	-	-
[illegible] (Rail)	-	-	-	-	-	-
Other Transit	5%	1,800	1,800	10%	5,000	5,000

1. AIRPORT SOUTH

1.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,000	13,800	15,500
• Supply	Sufficient land available.		

1.2 Centrality

- Reasonably well centred, on both a travel time and distance basis, within the potential market.

1.3 Major Infrastructure Requirements

- Widening of site area roads -- Elmcrest Road, Rathburn Road, and Eglinton Avenue.
- Highway 401 interchange (directional from and to the east) to serve the site.
- Highway 403 "arterial extension" from Cawthra Road to site.
- Matheson Boulevard extension to Dixie Road.
- Total cost - $25 million

1.4 Operating Conditions

- Satisfactory, subject to resolution of potential vehicular conflicts on Highway 401 at new interchange.

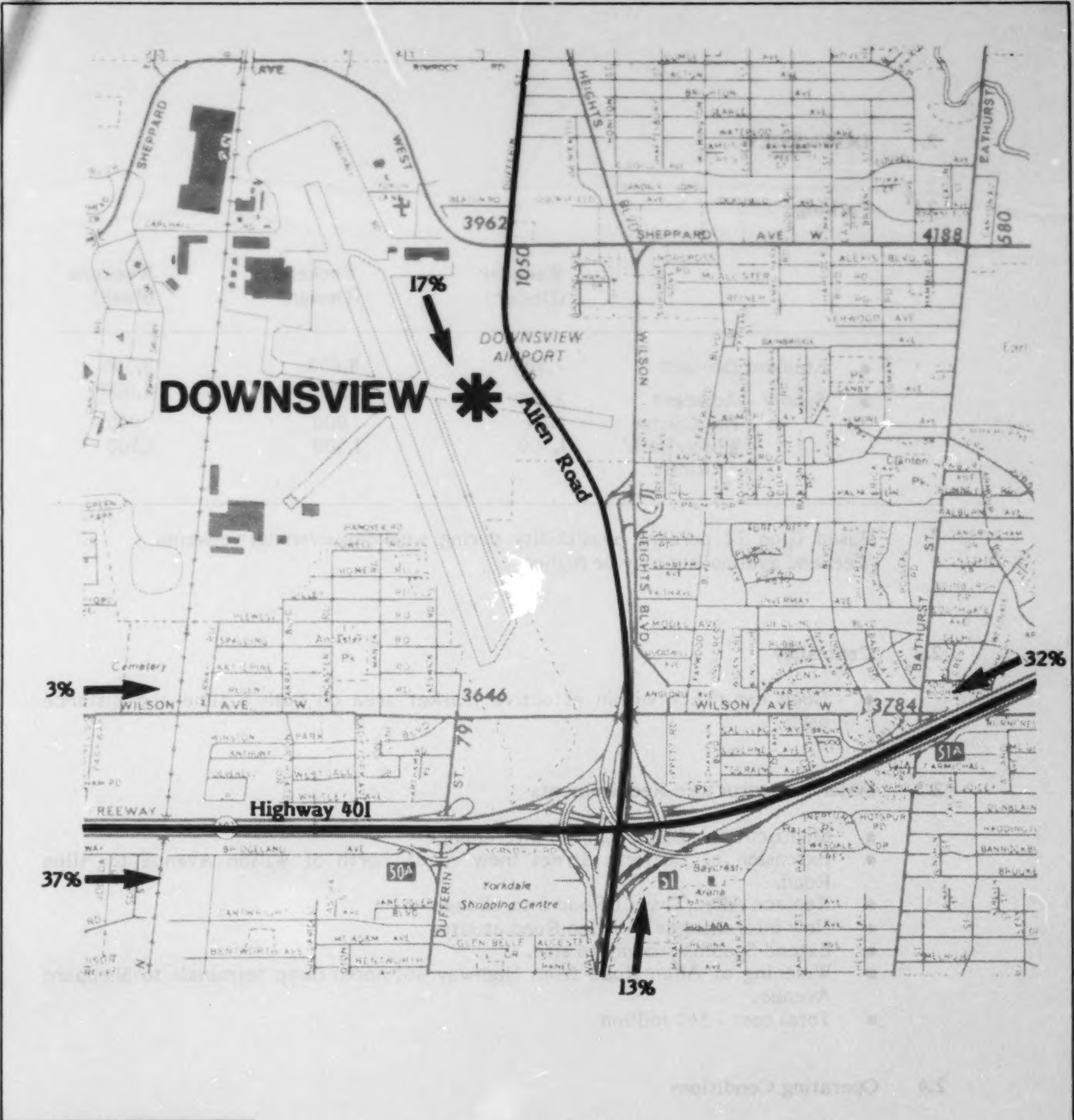
1.5 Summary

Strengths

- Located adjacent to focus of several freeways.
- Well located with respect to potential market, in terms of both travel distance and travel time.

Weaknesses

- **Too close to freeways to permit a sufficient number of properly spaced site access points to be developed.**
- **Very limited potential for near term rapid transit/commuter rail service.**



Approximate Scale 1:25,000

2. Downsview

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	**Typical %**	**Arrival**	**Departure**	**Typical %**	**Arrival**	**Departure**
·Private Autos	60%	6,900	7,600	50%	7,500	8,300
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit **·Subway**	25%	8,800	8,800	30%	15,000	15,000
·GO (Rail)	-	-	-	-	-	-
·Other Transit	10%	3,500	3,500	10%	5,000	5,000

2. DOWNSVIEW

2.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	7,900	8,600	9,300
• Supply - Adjacent	8,000+	8,000+	8,000+
- Tax Centre	N/A	900	900
- Wilson Park' N' Ride*	1,500	1,500	1,500

* Based upon 75 percent availability during weekday evening/weekend. Weekend availability may be higher.

2.2 Centrality

- Good centrality within effective market area on both a time and distance basis.

2.3. Major Infrastructure Requirements

- Modification of Dufferin/401 Interchange
- Extension of Dufferin Street (new road), north of Wilson Avenue to Allen Road.
- Replace Allen/Transit Road interchange
- New interchanges on Allen Road at site.
- Extend Spadina subway to site.
- Widening of Allen Road from Highway 401 north ramp terminals to Sheppard Avenue.
- Total cost - $40 million

2.4 Operating Conditions

- Good vehicular traffic conditions.
- Subway volume can be handled with, at most, modest additional service enhancements.

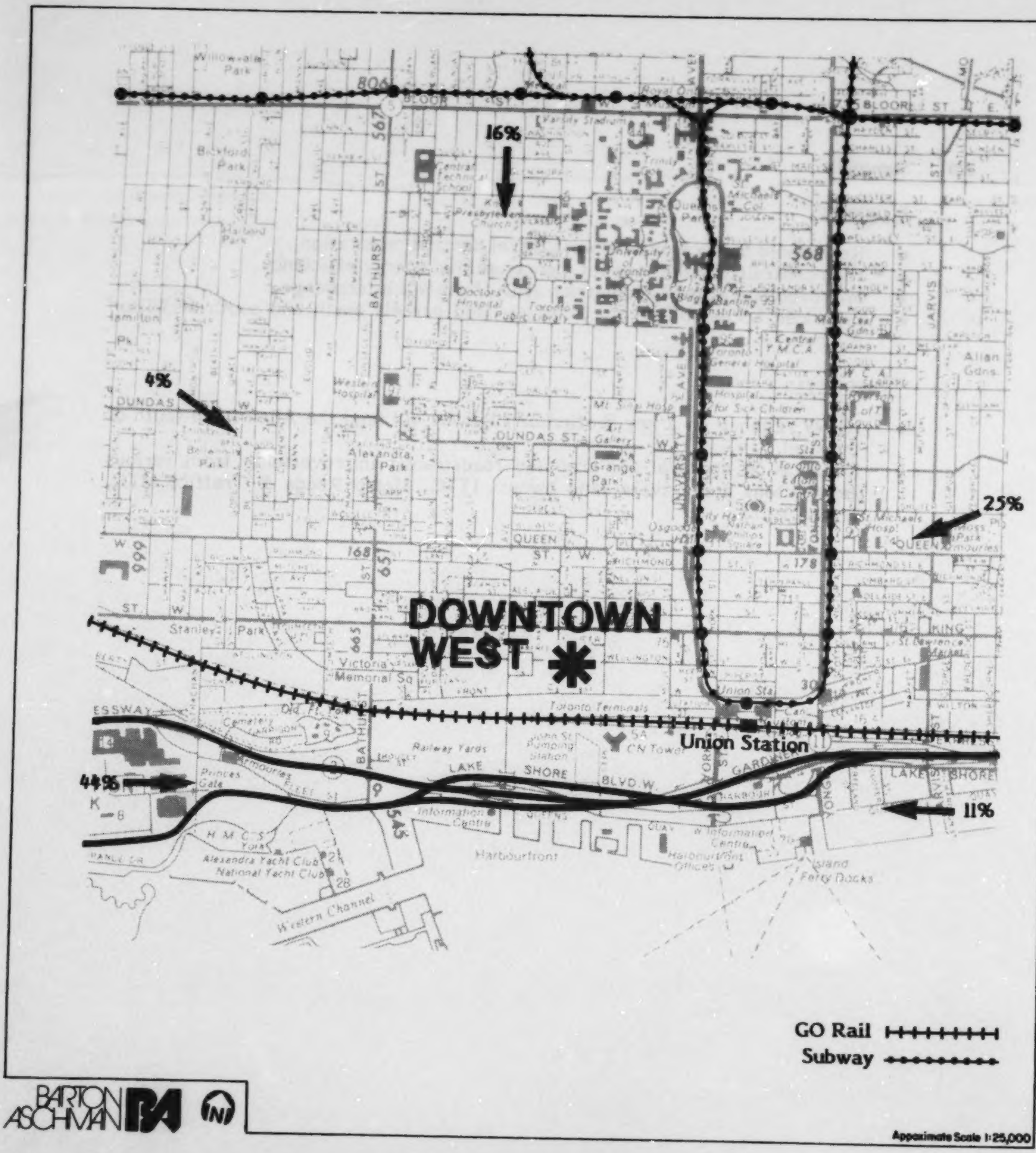
2.5 Summary

Strengths

- Reasonable balance of east-west travel demand orientation .
- High centrality within market, hence optimal energy efficiency.
- Improved operational geometrics at Dufferin/401 interchange.
- Enhanced accessability of remaining land parcels north and south of Wilson Avenue.

Weaknesses

- Heavy reliance on a key section of Highway 401 (and the Allen Road south of the site).
- Reliance on approval for proposed road/transit improvements from various jurisdictions and private land owners (TTC, Metro Roads & Traffic, MTC, Trizec, etc.).



3. Downtown West

Travel Mode	Weekday Typical %	Weekday Arrival	Weekday Departure	Weekend-Day Typical %	Weekend-Day Arrival	Weekend-Day Departure
	Design Hour Movements					
·Private Autos	45%	5,200	5,800	35%	5,300	5,800
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
· Subway	25%	8,800	8,800	30%	15,000	15,000
·GO (Rail)	20%	7,000	7,000	20%	10,000	10,000
·Other Transit	5%	1,800	1,800	5%	2,500	2,500

3. DOWNTOWN WEST

3.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
● Stadium Demand	6,100	6,100	6,300
● Supply - Site garage	2,500	2,500	2,500
- TPA*	1,300	1,300	1,300
- Other "public"**	3,500	3,500	3,500

* Assumes 50% availability of Toronto Parking Authority garages within 1000 metres of site (largely the City Hall garage).

** Assumes 25% availability of other public off-street stalls within 1000 metres of site.

(Note that no allowance is included for estimated several thousand on-street stalls in site environs.)

3.2 Centrality

- Close, in terms of distance, to centroid of assumed market area. Fair with respect to travel time centrality.

3.3 Major Infrastructure Requirements

- Front Street extension
- Parking garage - 2,500 stalls
- Total cost - $65 to $70 million

3.4 Operating Conditions

- Generally satisfactory vehicular operating conditions due to off-peak directional orientation of typical stadium weekday arrival pattern.
- Subway volumes can be handled with little or no service enhancements.
- Exception to above would be (admittedly infrequent) early weekday afternoon event (overlapping with afternoon commuter departure) which would be problematic.

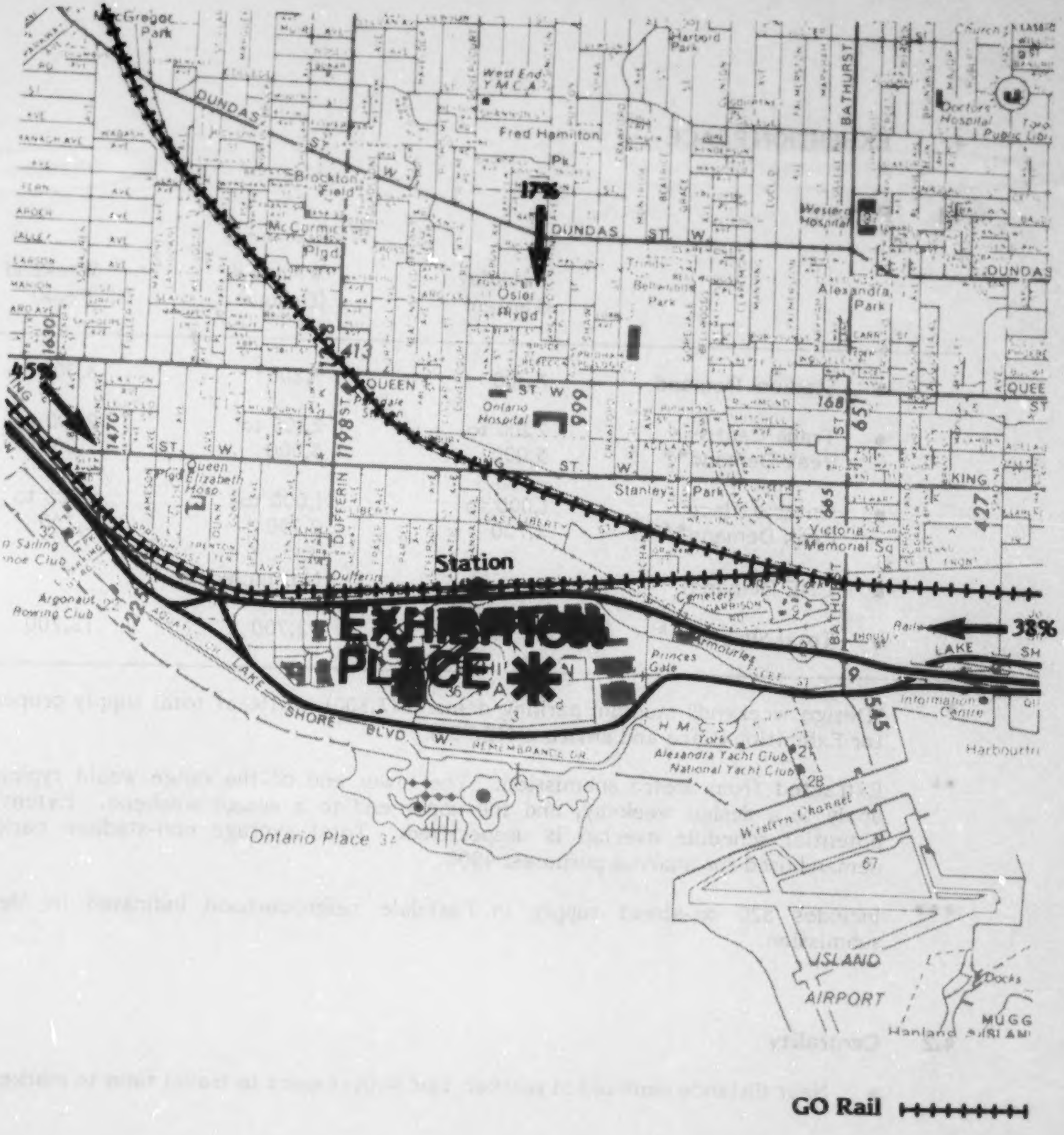
3.5 Summary

Strengths

- Centrally located within potential market with respect to distance .
- Within walking distance of subway (St. Andrew Station) and Union Station, and, hence, good mix of alternative travel modes available.
- Complementary support facilities (restaurants, hotels, etc.) will tend to reduce surge flow travel demands.

Weaknesses

- Sufficient parking potentially available. However, walking distances would be greater then 500 metres from the majority of off-site stalls.



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4. Exhibition Place

Travel Mode	Design Hour Movements					
	Weekday			Weekend-Day		
	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	55%	6,300	7,000	45%	6,800	7,500
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
· Subway	–	–	–	–	–	–
·GO (Rail)	20%	7,000	7,000	20%	10,000	10,000
·Other Transit	20%	7,000	7,000	25%	12,500	12,500

4. EXHIBITION PLACE

4.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	7,300	7,800*	8,300
• Trade Centre Peak Demand**	2,100 to 5,000	2,100 to 5,000	2,100 to 5,000
• Ontario Place Peak Demand**	1,000 to 2,750	1,000 to 2,750	1,000 to 2,750
• CNE Demand		Not included	
• Total Supply***	12,700	12,700	12,700

* "Design weekend" stadium parking demand (7,800) = 61% of total supply proposed for Exhibition Place and environs (12,700).

** Extracted from Metro submission. The lower end of the range would typically apply to a design weekday, and the upper end to a design weekend. Extent of potential schedule overlap is unspecified. Total average non-stadium parking demand used for analysis purposes: 4900.

*** Includes 820 on-street supply in Parkdale neighbourhood indicated in Metro submission.

4.2 Centrality

- Near distance centroid of market, fair with respect to travel time to market.

4.3 Major Infrastructure Requirements

- Front Street Extension and specialized "all-movements" interchange with Gardiner Expressway.
- Parking garages - 3,000 stalls, 2,600 stalls, 1,900 stalls.
- Dufferin Extension to Lakeshore, widening of Lakeshore Boulevard to provide eastbound left turn lane.
- Total Cost - $44 million (reflects apportionment of 61%* of total costs with the exception of the Front Street Extension for which only 6.1% of total costs is included).
- Cost excludes approximately 10 acre industrial land parcel required for parking garage.

4.4 Operating Conditions

- Adequate road and surface transit system capacity except for design weekend situation, and infrequent "special" early weekday afternoon event from which departure would take place during afternoon "commuter" peak period; e.g., Blue Jays opening day.
- Surface transit system capacity will be heavily taxed, particularly during design weekends.
- High proportion of structured parking likely to be operationally difficult.

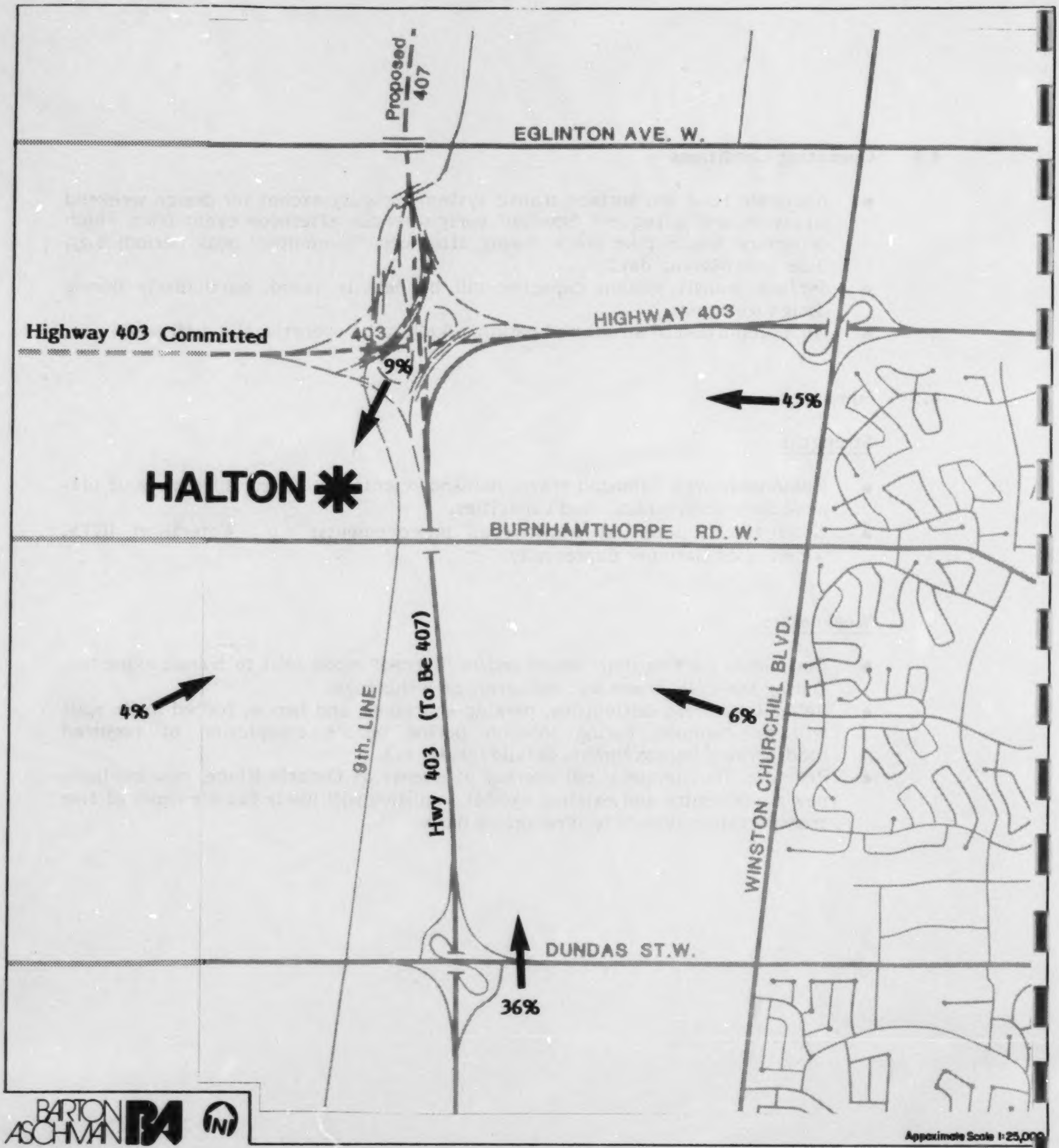
4.5 Summary

Strengths

- Reasonably well balanced travel demand orientation taking advantage of off-peak direction residual road capacities.
- Good future potential transit/road improvements; e.g., Waterfront ICTS, widening of Gardiner Expressway.

Weaknesses

- Occasional parking deficiences and/or "forced" mode split to transit expected. During the CNE, there will definitely be a shortage.
- Vehicular access difficulties, parking shortages, and hence, forced mode split will be common during interim period before completion of **required** road/parking improvements detailed under 4.3.
- Potential (but unspecified) overlap of events at Ontario Place, new stadium, new trade centre and existing exhibit facilities will likely tax elements of site transportation system on a recurring basis.



5. Halton

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	95%	10,900	12,100	85%	12,800	14,200
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
·Subway	-	-	-	-	-	-
·GO (Rail)	-	-	-	-	-	-
·Other Transit	-	-	-	5%	2,500	2,500

5. HALTON

5.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,600	14,700	16,500
• Supply	------	12,000 to 15,000	-----

5.2 Centrality

- Not well centred within market. Travel "cost" 20 percent (or more) higher than for more centrally located sites.

5.3 Major Infrastructure Requirements

- Widening of Highway 407 and addition of directional ramps from/to QEW west.
- Widening of area roads -- Burnhamthorpe, Eglinton, Ninth Line
- Two new interchanges on Highway 403 and 407 at site
- Total cost - $25 to $30 million

5.4 Operating Conditions

- Good

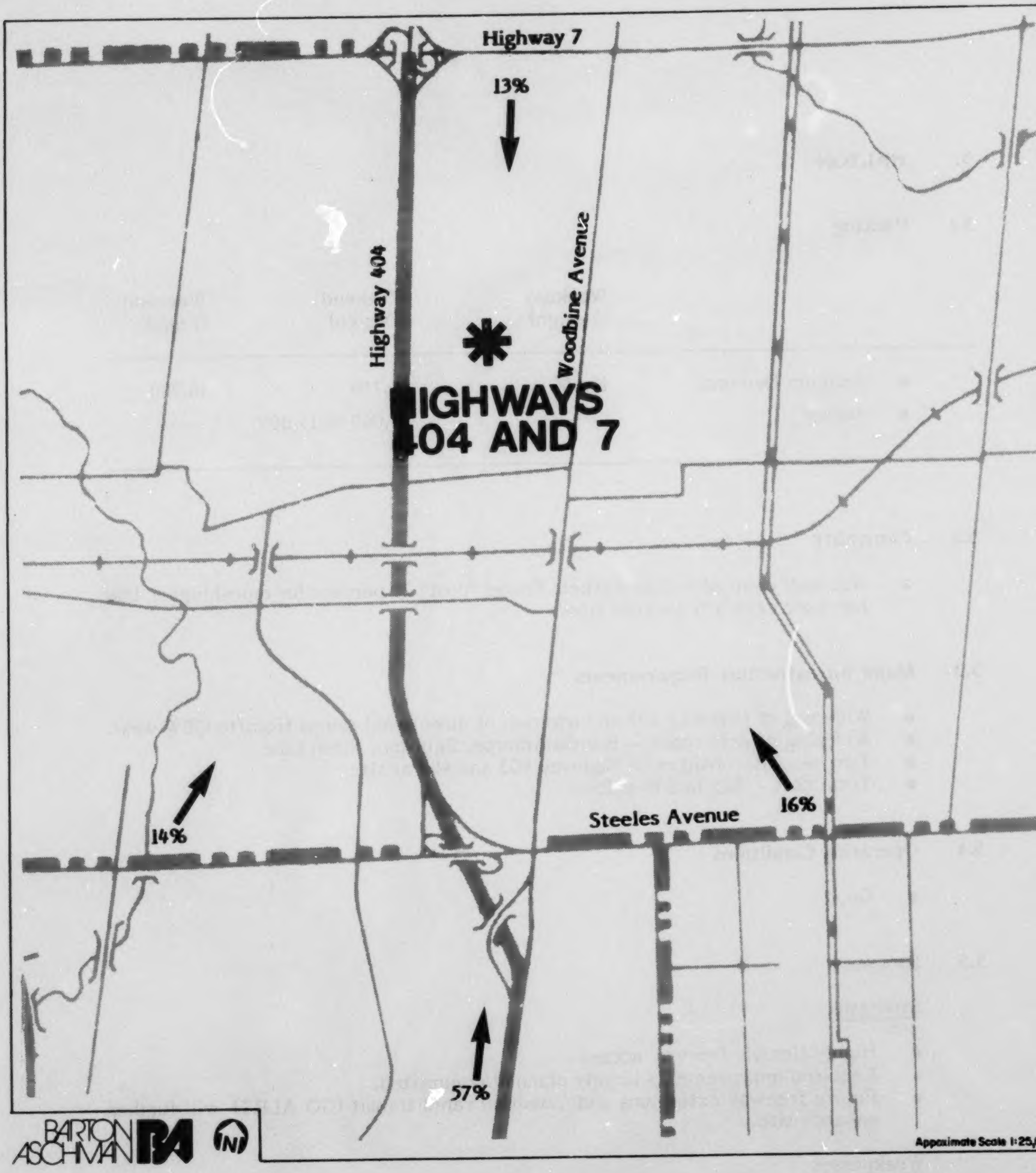
5.5 Summary

Strengths

- Highly flexible freeway access
- Required improvements largely planned/committed.
- Future freeway extensions and (possible) rapid transit (GO ALRT) will further enhance site.

Weaknesses

- Somewhat off-centre of market centroid.
- Very limited near-term transit potential.



6. Highways 404 and 7

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	95%	10,900	12,100	85%	12,800	14,200
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
· Subway	-	-	-	-	-	-
·GO (Rail)	-	-	-	-	-	-
·Other Transit	-	-	-	5%	2,500	2,500

6. HIGHWAYS 404 AND 7

6.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,600	14,700	16,500
• Supply	Sufficient land available.		

6.2 Centrality

- Reasonably well centred with respect to travel time, however, only fair with respect to travel distance; ie., a 15 percent premium.

6.3 Major Infrastructure Requirements

- Widen both Highway 404 and Woodbine - Steeles to Highway 7
- Highway 407 - Highway 400 to Woodbine
- Highway 404 interchange at site
- Total cost - $100+ million

6.4. Operating Conditions

- Good

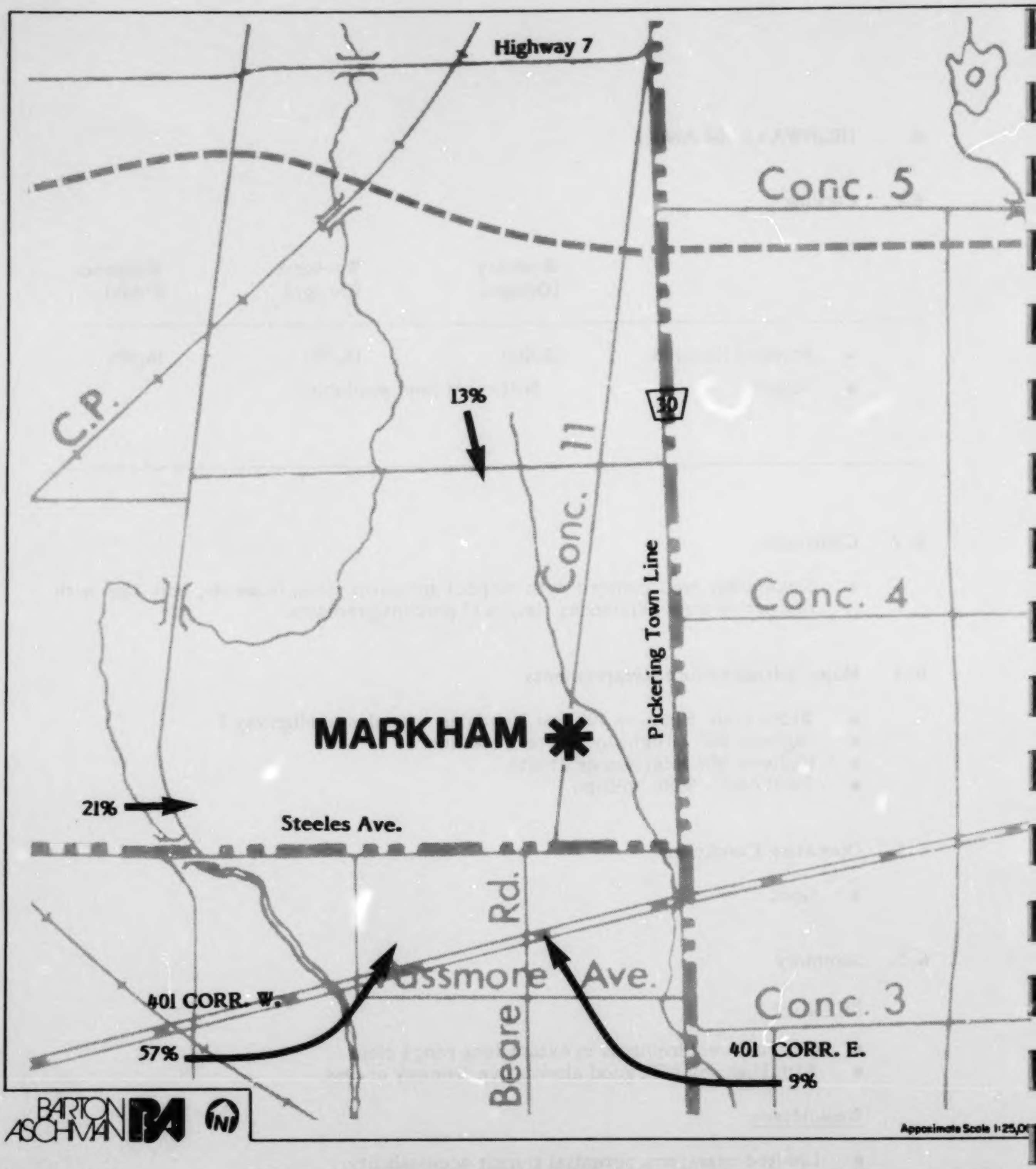
6.5. Summary

Strengths

- Key road requirements in extant long range plans.
- With Highway 407, good alternative freeway access.

Weaknesses

- Limited near-term potential transit accessability.
- Highway 407 not currently programmed.



7. Markham

Travel Mode	Design Hour Movements Weekday Typical %	Arrival	Departure	Weekend-Day Typical %	Arrival	Departure
·Private Autos	95%	10,900	12,100	85%	12,800	14,200
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
·Subway	-	-	-	-	-	-
·GO (Rail)	-	-	-	-	-	-
·Other Transit	-	-	-	5%	2,800	2,500

7. MARKHAM

7.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,600	14,700	16,500
• Supply	Sufficient land available.		

7.2 Centrality

- Poorly centred within the market, as travel "cost" premiums are at least 40 percent.

7.3 Major Infrastructure Requirements

- East Metro Freeway(EMF) - Highway 401 to Highway 7
- Widening of Highway 401 - Morningside to EMF.
- Widening of Steeles Avenue - Highway 404 to site (Alternatives, Highway 407 east of Highway 404)
- Total cost - $100+ million

7.4 Operating Conditions

- Satisfactory. However, demand heavily dependent on EMF.

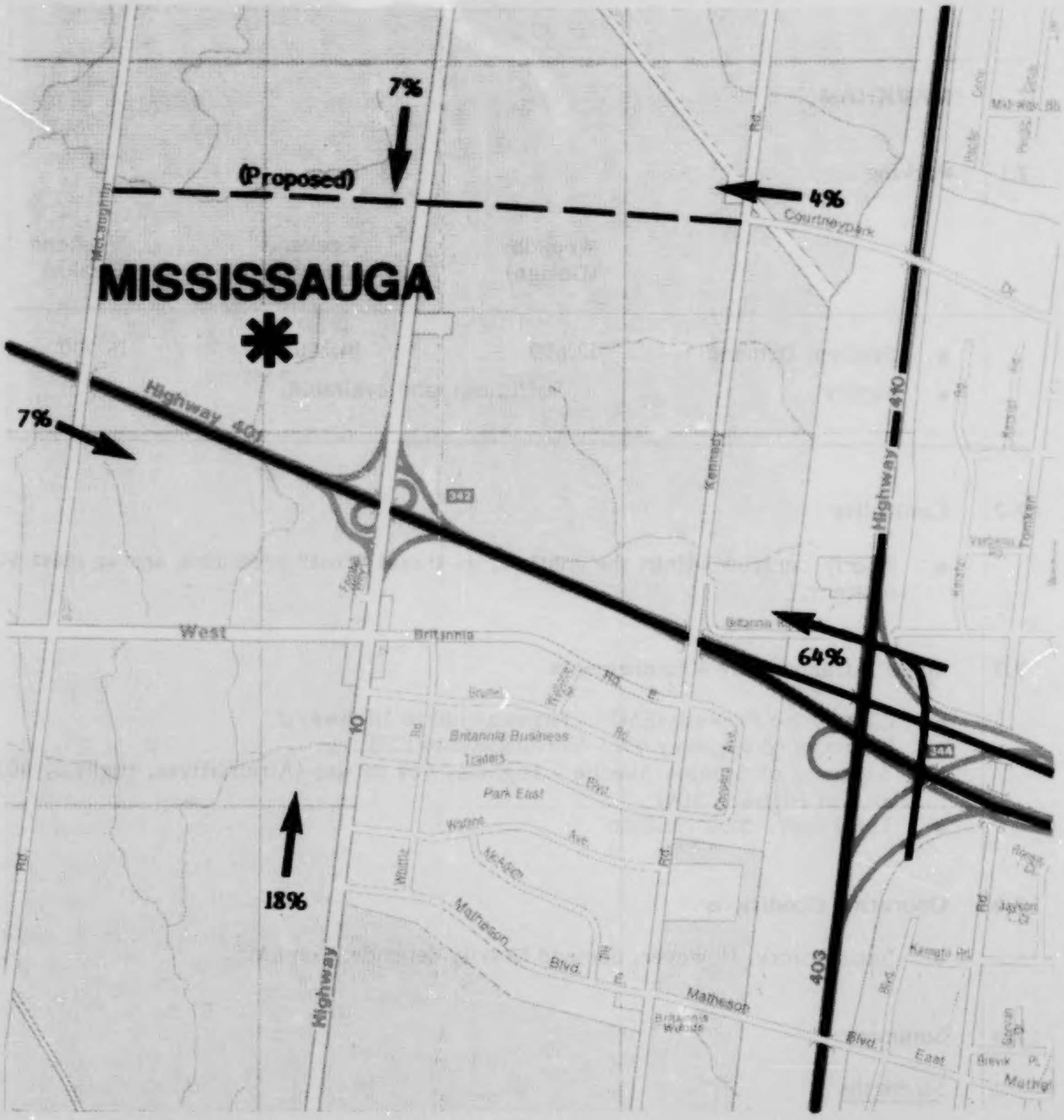
7.5 Summary

Strengths

- Key road requirements in extant long range plans, but not programmed.

Weaknesses

- Not well centred within market.
- Poor north/south arterial continuity.
- Limited potential transit accessibility.



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Approximate Scale 1:25,000

8. Mississauga

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	95%	10,900	12,100	85%	12,800	14,200
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit · Subway	-	-	-	-	-	-
·GO (Rail)	-	-	-	-	-	-
·Other Transit	-	-	-	5%	2,500	2,500

8. MISSISSAUGA

8.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,600	14,700	16,500
• Supply	18,000	18,000	18,000

8.2 Centrality

- High centrality with respect to travel time. However, only fair with respect to distance (+/- 10 percent premium)

8.3 Major Infrastructure Requirements

- Widening of area roads -- McLaughlin, Highway 10, and Courtneypark.
- Extension of Highway 401 collector lanes westerly by one concession to Mavis Road.
- New or modified interchanges on Highway 401 at Highway 10 and the site.
- Modified Highway 410/Courtneypark interchange
- Courtneypark interchange at site
- Total cost - $20 to $25 million (excluding property)

8.4 Operating Conditions

- Good

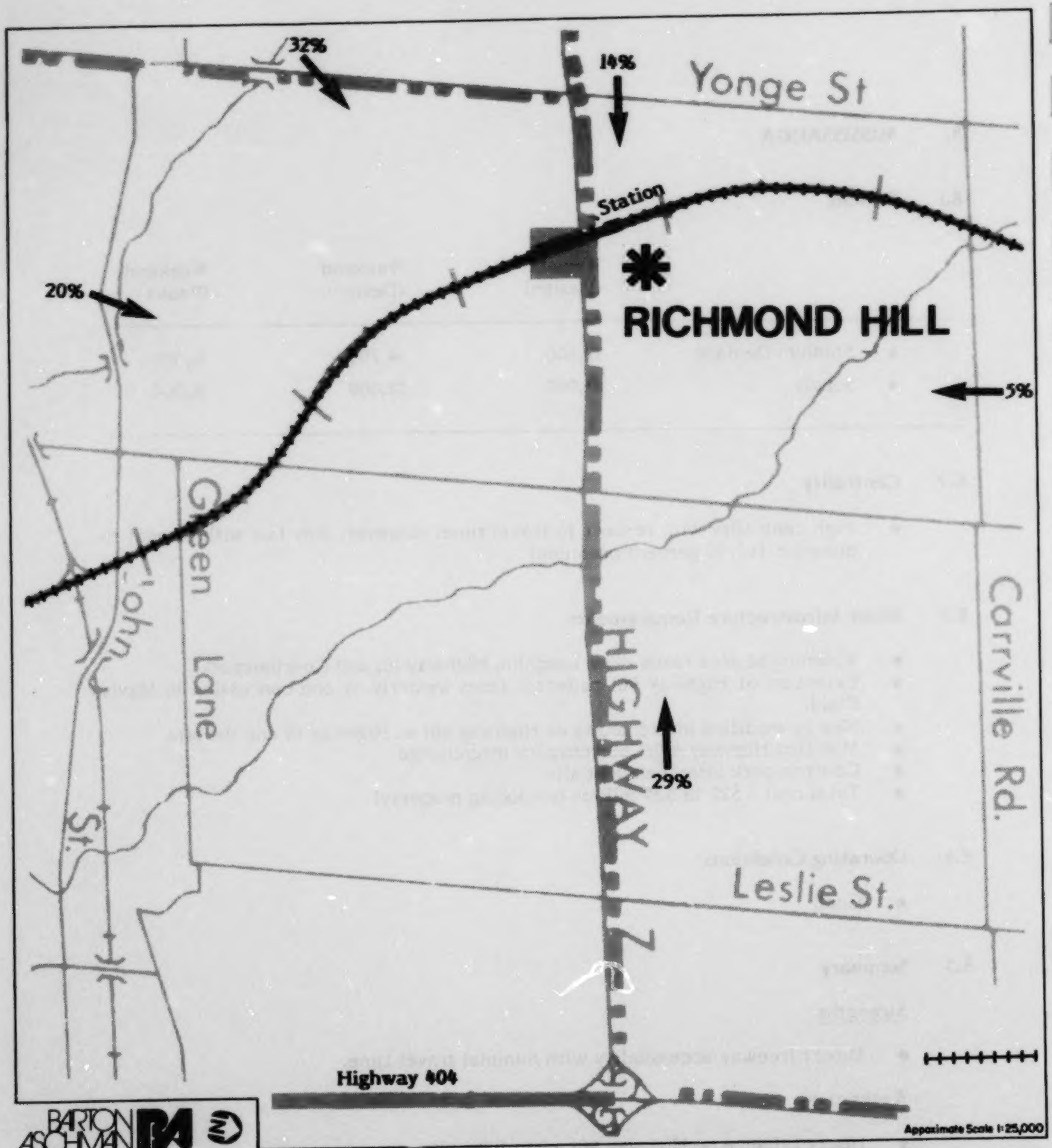
8.5 Summary

Strengths

- Direct freeway accessibility with minimal travel time.

Weaknesses

- Heavy reliance on Highway 401 east of the site.
- Little potential for significant transit service.



BARTON ASCHMAN

9. Richmond Hill

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	**Typical %**	**Arrival**	**Departure**	**Typical %**	**Arrival**	**Departure**
·Private Autos	90%	10,300	11,500	80%	12,000	13,300
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
·Subway	-	-	-	-	-	-
·GO (Rail)	5%	1,800	1,800	5%	2,500	2,500
·Other Transit	-	-	-	5%	2,500	2,500

9. RICHMOND HILL

9.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,000	13,800	15,500
• Supply - Site	8,300	8,300	8,300
- Shared *	7,600	7,600	7,600

* 100% availability doubtful, particularly on weekdays.

9.2 Centrality

- Not well centred with respect to distance within the market (+/- 20% greater travel distance than more centrally located sites). With Highway 407 in place, site is fair with respect to travel time.

9.3 Major Infrastructure Requirements

- Completion of Highway 407 between Highway 400 and Highway 404
- Highway 407 interchange at site
- Total cost - $100+ million.

9.4 Operating Conditions

- Satisfactory

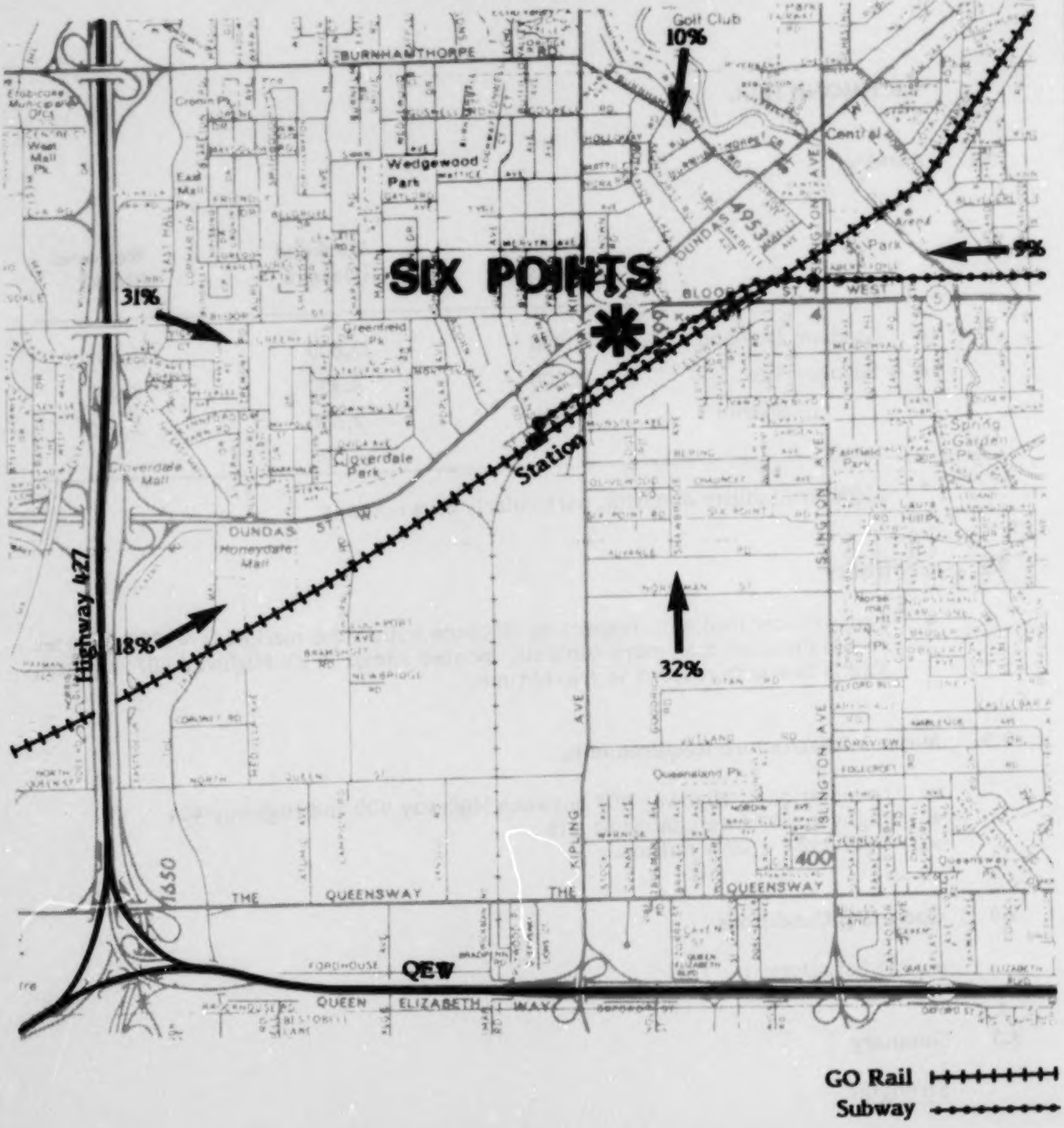
9.5 Summary

Strengths

- Potential for integration with a GO Rail station on Richmond Hill line (admittedly a minor component of the GO Rail system).
- Primary requirement, Highway 407, is a planned improvement.

Weaknesses

- Only fair with respect to market centrality.
- Heavy reliance on one freeway facility and associated interchanges.
- While the start of construction of "Highway 7N" west of Yonge Street is programmed prior to 1990, Highway 407 and associated interchanges are not.



BARTON ASCHMAN

Approximate Scale 1:25,000

10. Six Points

Travel Mode	Design Hour Movements					
	Weekday			Weekend-Day		
	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	55%	6,300	7,000	45%	6,800	7,500
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
· Subway	25%	8,800	8,800	30%	15,000	15,000
·GO (Rail)	5%	1,800	1,800	5%	2,500	2,500
·Other Transit	10%	3,500	3,500	10%	5,000	5,000

10. SIX POINTS

10.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	7,300	7,800	8,300
• Supply - Site garage	2,000	2,000	2,000
- TTC*	2,000	2,000	2,000
- Other surface**	3,600	4,500	4,500
- Other shared (retail/commercial)	Some potential, mostly weekend.		

* Assumed 75 percent availability for weekday evening/weekend events. Weekend availability may be higher.

** Assumed 80/100 percent availability for weekday evening/weekend events.

10.2 Centrality

- Excellent distance centrality within market. However, only fair with respect to travel time.

10.3 Major Infrastructure Requirements

- Rebuild Six Points interchange
- Parking structure - 2000 stalls
- Widening of Burnhampthorpe and Kipling (or Islington) between site and freeway interchanges.
- Total cost - $35 million

10.4 Operating Conditions

- Sufficient vehicular corridor capacity. However, detailed examination of Six Points interchange required.
- Subway volumes can apparently be handled with minimal additional service enhancements.

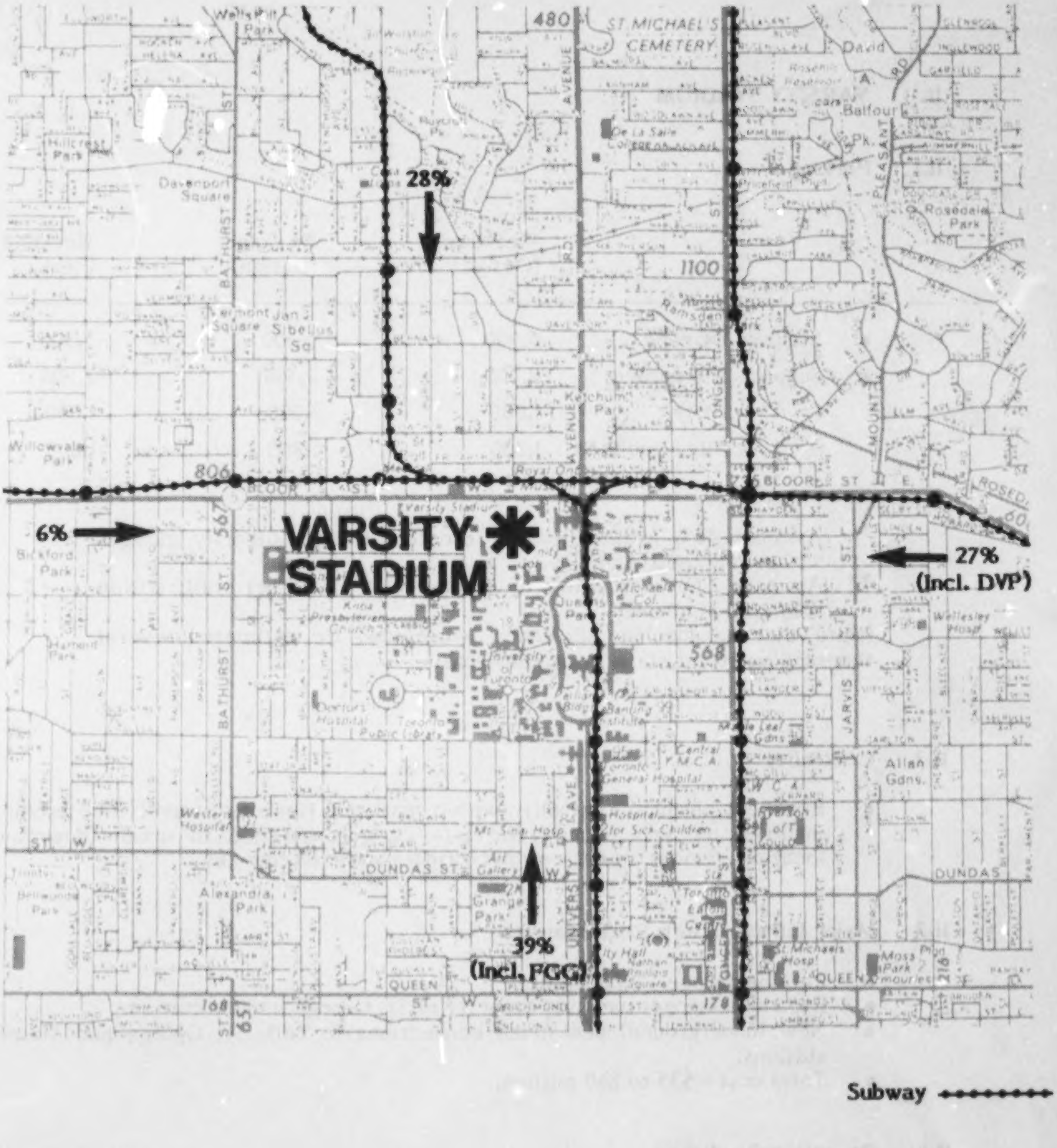
10.5 Summary

Strengths

- Good mix of transportation facilities: GO Rail, TTC Subway, four major arterial routes.
- Within two kilometers of two freeways, each of which provide ten lanes in a "core-collector" pattern, and a total of four interchanges with the four arterial roads serving the site; ie., 427/Burhamthorpe; 427/Dundas; QEW/Kipling; QEW/Islington.
- "Informal" parking distribution will tend to reduce the risk of serious congestion at key junctions on the road system.
- Relatively well located in terms of potential market.

Weaknesses

- Widening of Burnhamthorpe and Kipling may be difficult to achieve in terms of property (R.O.W.) acquisition.
- Rebuilding of Six Points interchange would have to be proceeded with at once.
- May require additional parking for weekday events.
- No direct freeway access.



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11. Varsity Stadium

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	**Typical %**	**Arrival**	**Departure**	**Typical %**	**Arrival**	**Departure**
·Private Autos	40%	4,600	5,100	30%	4,500	5,000
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit · Subway *	55%	19,300	19,300	60%	30,000	30,000
·GO (Rail)	-	-	-	-	-	-
·Other Transit	-	-	-	-	-	-

* Includes 15% transferring to/from GO Rail at Union Station (both weekday and weekend-day).

11. VARSITY STADIUM

11.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	5,400	5,300	5,300
• Supply - Site garage	2,500	2,500	2,500
- TPA*	1,000	1,000	1,000
- Other public**	1,800	1,800	1,800

* Assumes 50% availability of Toronto Parking Authority garages within 1000 metres of site.

** Assumes 25% availability of other public off-street stalls within 1000 metres of site.

(Note that no specific allowance is included for estimated several thousand on-street stalls in site environs.)

11.2 Centrality

- Excellent physical centrality within market. However, travel time premium incurred for vehicular traffic (+/- 20 percent) due to urban (downtown) location, remote from freeway corridors and interchanges.

11.3 Major Infrastructure Requirements

- Parking garage - 2,500 stalls
- Expand passenger handling capacity of St. George subway station.
- New (underground) pedestrian connections to both St. George and Museum stations.
- Total cost - $35 to $40 million.

11.4 Operating Conditions

- Vehicular operating conditions acceptable due to off-peak directional orientation of typical stadium weekday arrival pattern.
- Subway line-haul flows can be generally accommodated within existing service levels due to typical reverse flow nature of weekday demands.
- Exception to above would be (admittedly infrequent) early weekday afternoon event (overlapping with afternoon commuter departure), which would be problematic, to say the least.

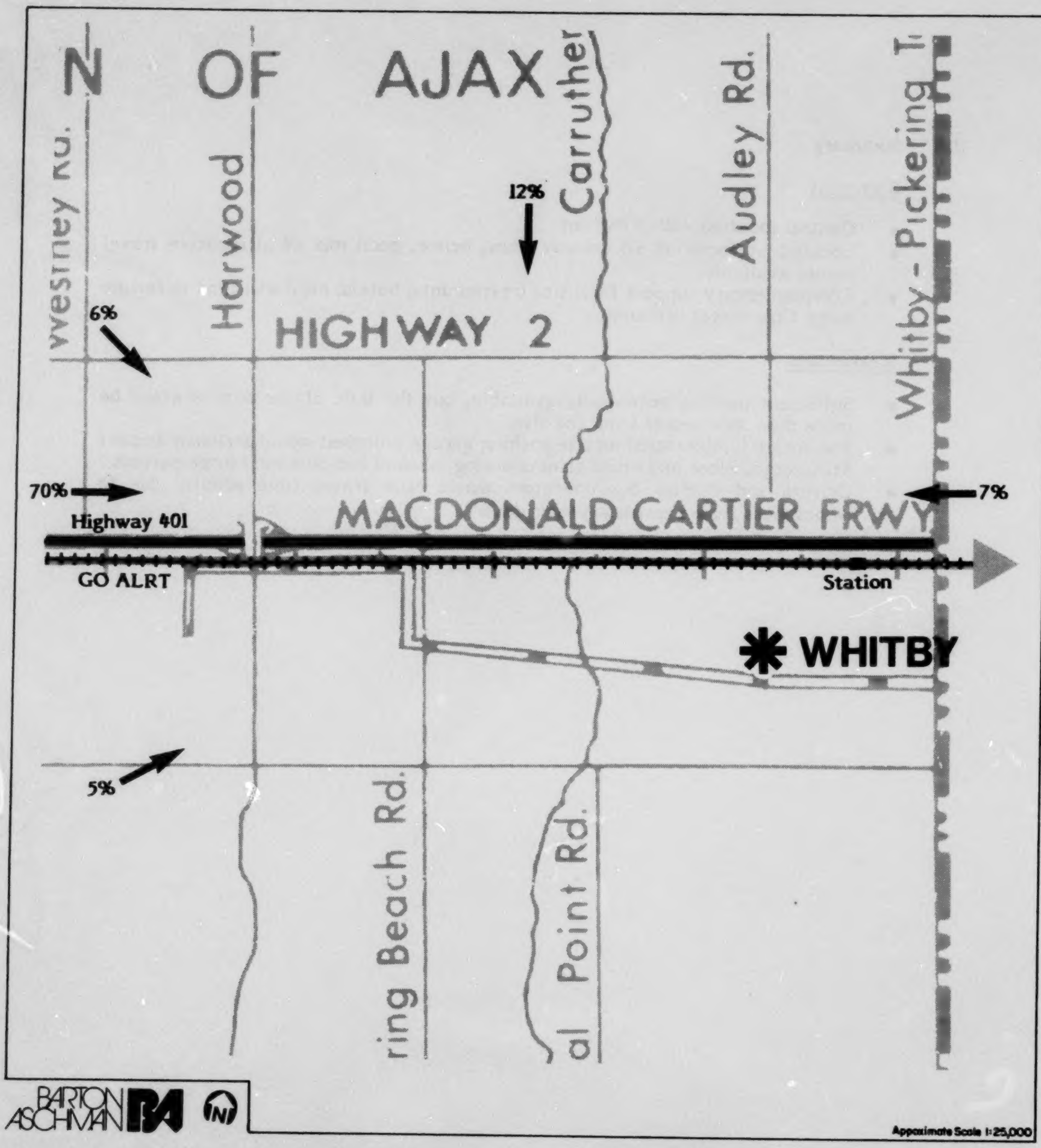
11.5 Summary

Strengths

- Central location within market.
- Located at focus of all subway lines, hence, good mix of alternative travel modes available.
- Complementary support facilities (restaurants, hotels, etc.) will tend to reduce surge flow travel demands.

Weaknesses

- Sufficient parking potentially available, but the bulk of the spaces would be more than 500 metres from the site.
- The major (2,500 stalls) on site parking garage proposed would seriously impact St. George, Bloor and other streets during inbound and outbound surge periods.
- Drivers and charter bus operators would face travel time penalty due to remoteness from expressway corridors.



12. Whitby

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	**Typical %**	**Arrival**	**Departure**	**Typical %**	**Arrival**	**Departure**
·Private Autos	90%	10,300	11,500	80%	12,000	13,300
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit						
· Subway	-	-	-	-	-	-
·GO (Rail)	5%	1,800	1,800	10%	5,000	5,000
·Other Transit	-	-	-	-	-	-

12. WHITBY

12.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	12,000	13,800	15,500
• Supply	Sufficient land available.		

12.2 Centrality

- Furthest removed from centre of market. Requires 50 to 80 percent greater travel time/distance than more central sites.

12.3 Major Infrastructure Requirements

- Extensive widening of Highway 401 to 8 to 10 lanes, or a major "forcing" of transit mode split to about 50 percent
- Two new interchanges on Highway 401.
- Widening of perimeter roads -- Bayly Street, Pickering Beach Road, and Regional Road 23.
- Total cost - $65+ million

12.4 Operating Conditions

- Potential congestion on Highway 401 west of site due to directional predominance of traffic flows.

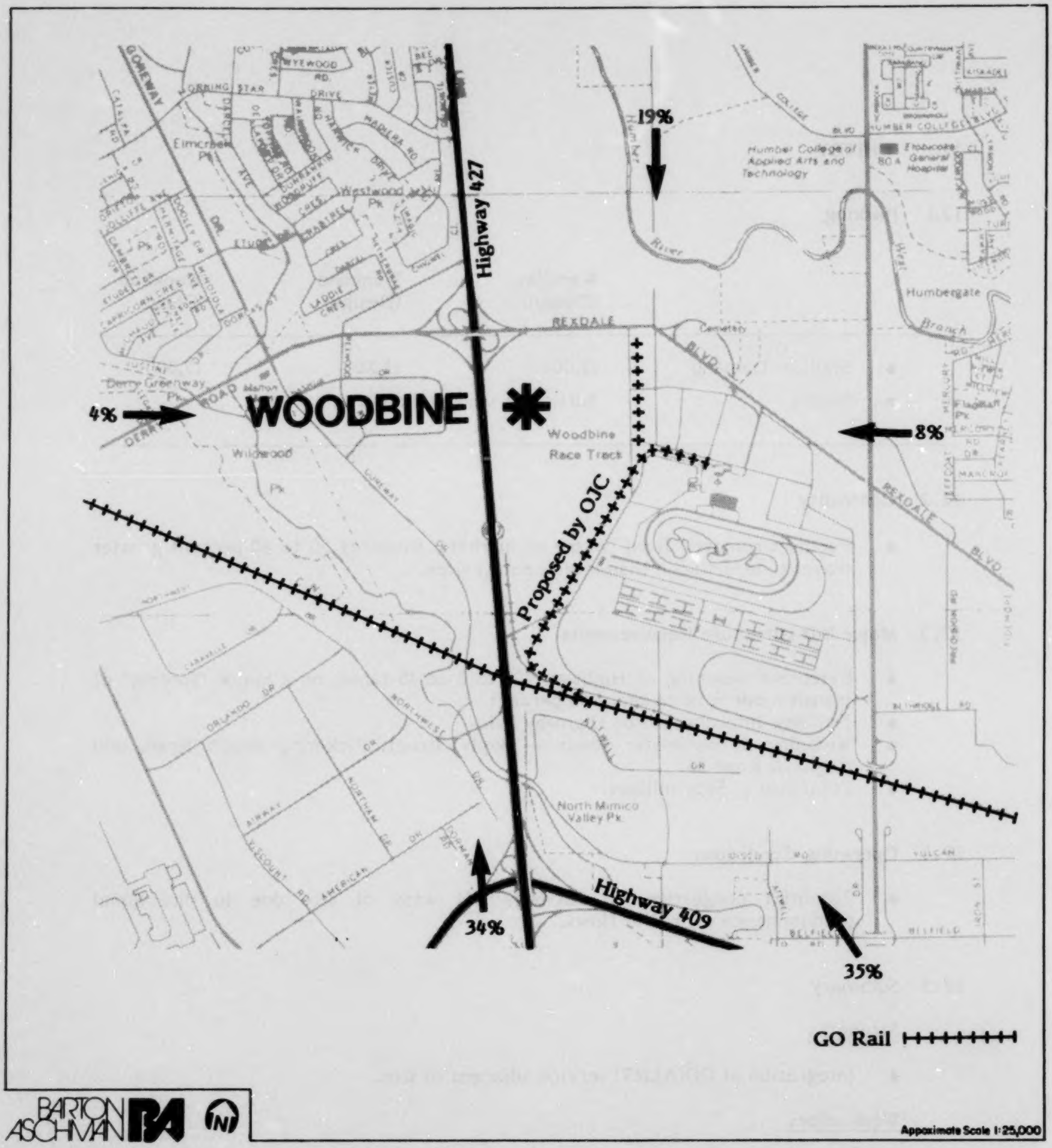
12.5 Summary

Strengths

- Integration of GO(ALRT) service adjacent to site.

Weaknesses

- Westerly predominance of traffic demands reduces cost effectiveness of required road improvements.
- Excessive energy expenditure due to poor market centrality.



13. Woodbine

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	**Typical %**	**Arrival**	**Departure**	**Typical %**	**Arrival**	**Departure**
·Private Autos	**85%**	**9,700**	**10,800**	**75%**	**11,300**	**12,500**
·Charter Buses	**5%**	**45**	**45**	**10%**	**125**	**125**
Non-Auto Person Trips by Transit **· Subway**	-	-	-	-	-	-
·GO (Rail)	**5%**	**1,800**	**1,800**	**5%**	**2,500**	**2,500**
·Other Transit	**5%**	**1,800**	**1,800**	**10%**	**5,000**	**5,000**

13. WOODBINE

13.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
● Stadium Demand	11,300	13,000	14,500
● Supply - Site	10,500	10,500	10,500
- Surplus OJC	9,000	5,500	5,500

13.2 Centrality

- High centrality with respect to travel time. However, only fair with respect to distance.

13.3. Major Infrastructure Requirements

- GO Train link and station.
- Widening of Highway 427 - Dixon Road to Rexdale Boulevard.
- Widening of Carlingview Drive - site to Dixon Road.
- Access ramps from/to Highway 427
- Total cost - $10 to $15 million

13.4 Operating Conditions

- Typical weekday design operating conditions good.
- Between 25 and 50 percent of racetrack patron arrival and departure traffic would normally overlap with afternoon events in stadium on weekends in May, June, July, September and October.
- For such dual events, site access points cannot adequately handle combined volumes during the weekend stadium traffic design hour, without significant changes in event scheduling.

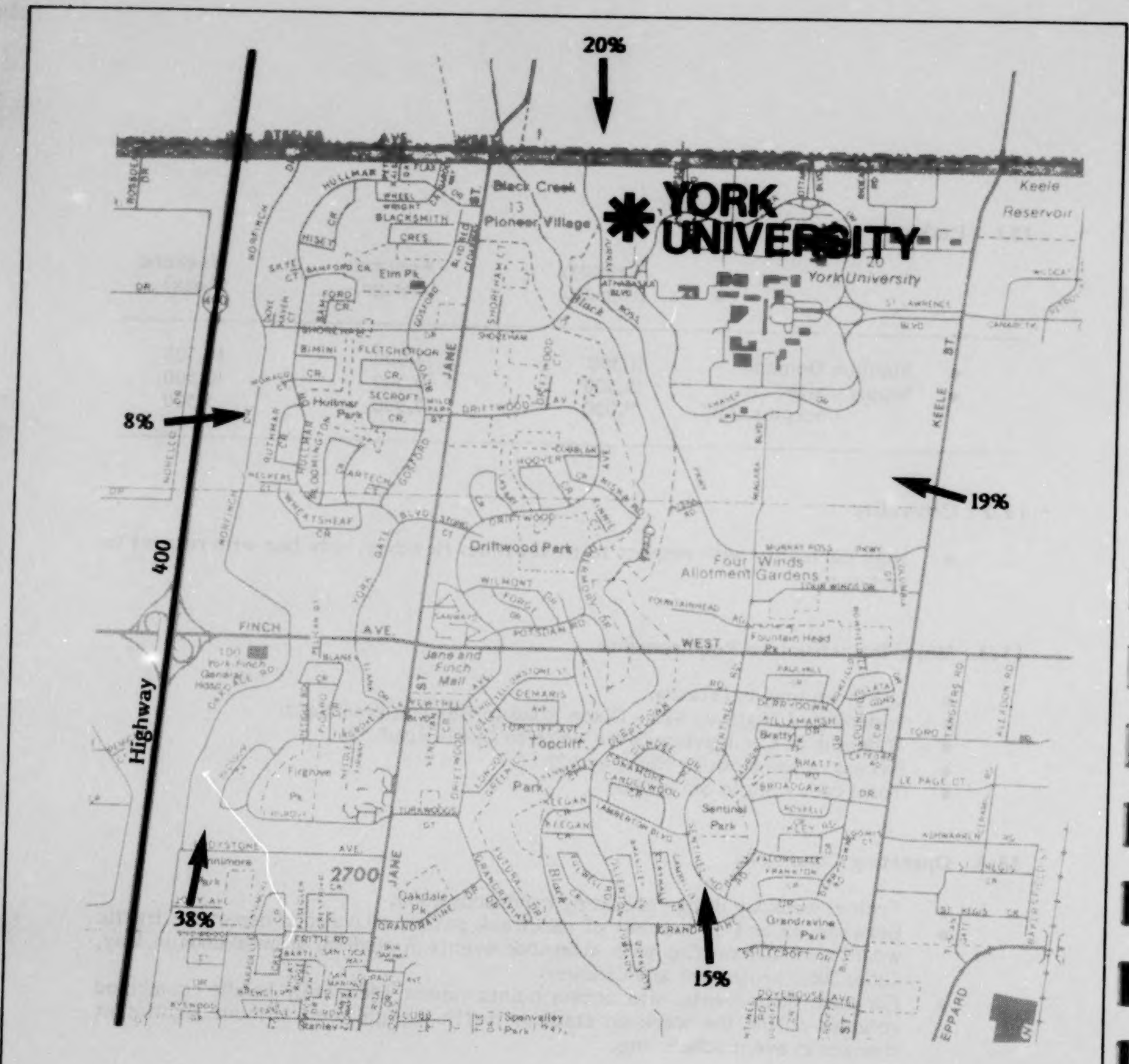
13.5 Summary

Strengths

- Key required road system elements largely committed.
- Good alternate freeway/arterial routing choices available.

Weaknesses

- **Weekend** overlaps with racetrack events would tax site access points and area road system.
- Relatively little potential for significant transit service.



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14. York University

	Design Hour Movements					
	Weekday			Weekend-Day		
Travel Mode	Typical %	Arrival	Departure	Typical %	Arrival	Departure
·Private Autos	85%	9,700	10,800	75%	11,300	12,500
·Charter Buses	5%	45	45	10%	125	125
Non-Auto Person Trips by Transit · Subway	-	-	-	-	-	-
·GO (Rail)	-	-	-	-	-	-
·Other Transit	10%	3,500	3,500	15%	7,500	7,500

14. YORK UNIVERSITY

14.1 Parking

	Weekday (Design)	Weekend (Design)	Weekend (Peak)
• Stadium Demand	11,300	13,000	14,500
• Supply - Existing surface	2,000	2,000	2,000
- Potential surface	1,500	1,500	1,500
- Hydro lands (surface)*	7,800	7,800	7,800
- Site garage	3,200	3,200	3,200

* Estimated potential within 1000 metres of site.

14.2 Centrality

- Reasonably well-centred with respect to travel time. However, only fair with respect to travel distance.

14.3 Major Infrastructure Requirements

- Widening of site area roads - Jane Street between Finch Avenue and Highway 407* and Steeles Avenue between Highway 400 and Keele.
- Modify Steeles/Highway 400 interchange to provide free flow directional ramps to/from the south.
- Steeles Avenue/site interchange.
- Jane Street/site interchange.
- Parking garage - 3,200 stalls.
- Total cost - $30 to $35 million.

14.4 Operating Conditions

- Can operate satisfactorily, with some congestion on connecting arterials - Steeles, Finch, Jane, and to a lesser extent, Keele.
- Some indirect routing to/from the north via Highway 7 (407) connections required, in order to mitigate the effect of predominant travel demand to/from the south.

---

* Highway 407 "committed" between Highway 427 and Highway 400 - Jane Street.

14.5 Summary

Strengths

- Well located with respect to two freeways: existing Highway 400 at Steeles west of the site; and future Highway 407 (partially committed) north of the site.
- Major arterial streets serving the site can be widened readily within existing road allowances.

Weaknesses

- Limited potential for near-term transit service.
- Latest information received from MTC is to the effect that the section of Highway 407 between Highways 427 and 400 is not "officially programmed" at this time, but that it "may well be under construction during the 1988 to 1992 period". If this link is not to be available for several years following completion of the stadium, the practical utility of Jane and Keele Streets north of the site to act as "relief valves" (via their connections to Highway 407) would be reduced for otherwise southerly oriented traffic, and routed via Highway 401 - Highway 427 (extension) and Highway 407 to the site environs. The net effect would certainly be a reduction in the level of traffic service to the site and an additional requirement for widening Highway 7 and its intersections with Jane and Keele Streets.

STADIUM STUDY COMMITTEE REPORT

APPENDIX IV

COMPARATIVE INFORMATION ON OTHER NORTH AMERICAN STADIA

STADIUM STUDY COMMITTEE REPORT

APPENDIX IV

COMPARATIVE INFORMATION ON OTHER NORTH AMERICAN STADIA

Part i PROFILES OF COVERED STADIA

1. B.C. Place*
2. Carrier (Syracuse) Dome
3. Houston Astrodome*
4. Indianapolis Hoosier Dome
5. Hubert H. Humphrey (Minnneapolis) Metrodome*
6. Pontiac Siverdome*
7. Seattle Kingdome*
8. Superdome (New Orleans)*
9. Tacoma Dome

Part ii FACT SHEET ON OTHER STADIA

* Selected financial information on these stadia is included in Appendix VI.

PROFILE OF EXISTING COVERED STADIA

Stadium Name: B.C. Place

Owner: B.C. Municipal Building Corporation

Location: Downtown Vancouver, British Columbia

Stadium Size: Baseball - 50,000
Football - 60,000

Construction Cost and Completion Date: $126 Million
Completed in 1982

Type of Dome Structure: Air Supported Fabric Roof

Other Sports or Tourist Facilities on Site: Expo'86 Facilities

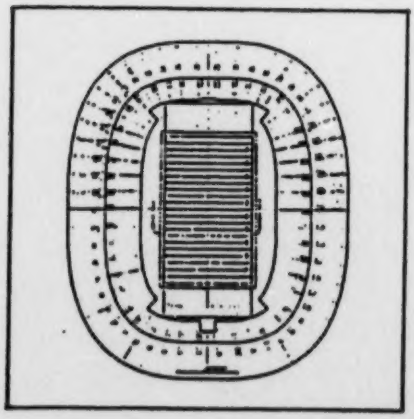
Total Site Size: 20 Acres

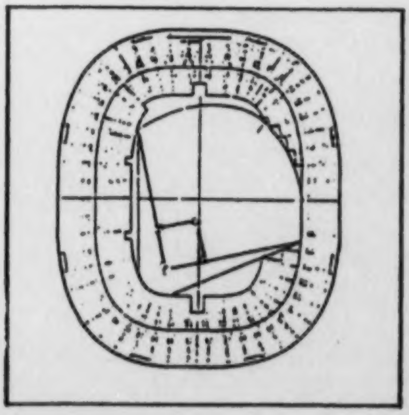
Transportation Split: Auto 60%
Transit 40%

On Site Parking: 2,000 Vehicles

Major Sports Tenants: British Columbia Lions (CFL)
Vancouver Whitecaps (NASL)

Population of Urban Area: 1,185,900





PROFILE OF EXISTING COVERED STADIA

Stadium Name: Carrier Dome

Owner: University Of Syracuse

Location: Syracuse University Campus, Syracuse, New York

Stadium Size: Baseball - 27,000
Football - 50,000

Construction Cost and Completion Date: $30 Million
Completed in 1980

Type of Dome Structure: Air Supported Fabric Roof

Other Sports or Tourist Facilities on Site: Syracuse University Hall of Fame

Total Site Size: 7.7 Acres

Transportation Split:

On Site Parking: 3,000 Vehicles On Campus In Vicinity Of Dome

Major Sports Tenants: Syracuse University Orangemen
(Football & Basketball)

Population of Urban Area: 648,800

PROFILE OF EXISTING COVERED STADIA

Stadium Name: Houston Astrodome

Owner: Harris County, Texas

Location: 8 Miles From Downtown Houston, Texas

Stadium Size: Baseball - 45,000
Football - 52,000

Construction Cost and Completion Date: $45.4 Million
Completed in 1965

Type of Dome Structure: Concrete & Steel Frame, Plexiglas Shell

Other Sports or Tourist Facilities on Site: Convention Centre And Arena

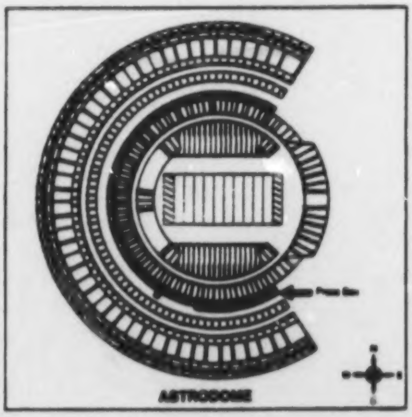
Total Site Size: 257 Acres

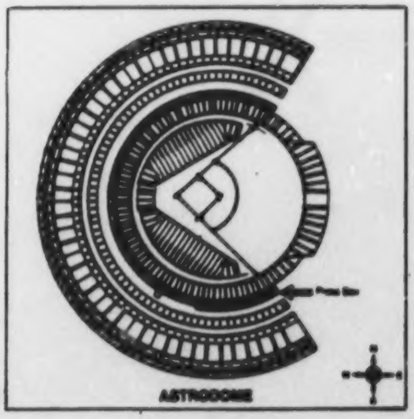
Transportation Split: Auto 85%
Transit 15%

On Site Parking: 30,000 Vehicles

Major Sports Tenants: Houston Astros (NL)
Houston Oilers (NFL)

Population of Urban Area: 3,028,000





PROFILE OF EXISTING COVERED STADIA

Stadium Name: Indianapolis Hoosier Dome

Owner: The Capital Improvement Board of Managers of Marion County

Location: Marion County, Indiana

Stadium Size: Baseball - N/A
Football - 63,000

Construction Cost and Completion Date: $65 Million
To Be Completed in July, 1984

Type of Dome Structure:

Other Sports or Tourist Facilities on Site: Indiana Convention/Exposition Centre

Total Site Size:

Transportation Split:

On Site Parking:

Major Sports Tenants: No Professional Teams are Scheduled To Play At The Dome

Population of Urban Area: 1,179,200

PROFILE OF EXISTING COVERED STADIA

Stadium Name: Hubert H. Humphrey Metrodome

Owner: Metropolitan Sports Facilities Commission, Minneapolis

Location: Downtown Minneapolis, Minnesota

Stadium Size: Baseball - 55,000
Football - 62,000

Construction Cost and Completion Date: $54.5 Million
Completed in 1981

Type of Dome Structure: Air Supported Fabric Roof

Other Sports or Tourist Facilities on Site:

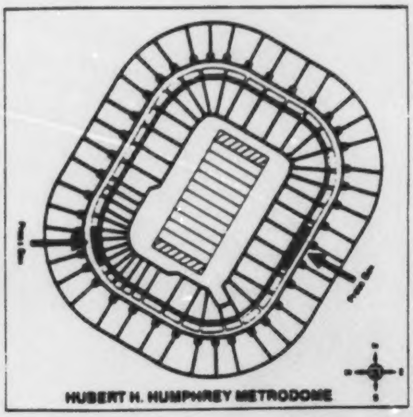
Total Site Size: 22 Acres

Transportation Split:

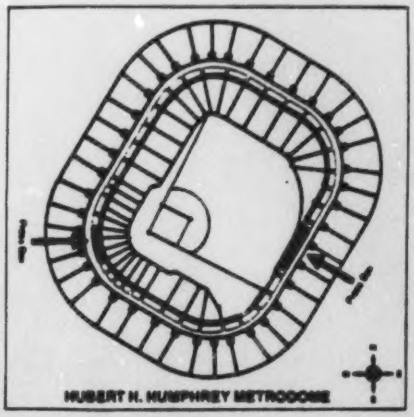
On Site Parking: 150 Vehicles

Major Sports Tenants: Minnesota Twins (AL)
Minnesota Vikings (NFL)

Population of Urban Area: 2,193,600



HUBERT H. HUMPHREY METRODOME



HUBERT H. HUMPHREY METRODOME

PROFILE OF EXISTING COVERED STADIA

Stadium Name: Pontiac Silverdome

Owner: City Of Pontiac Michigan

Location: Pontiac County, Michigan, Approximately
30 Miles From Detroit.

Stadium Size: Baseball - N/A
Football - 80,600

Construction Cost and Completion Date: $43.5 Million
Completed in 1975

Type of Dome Structure: Air Supported Fabric Roof

Other Sports or Tourist Facilities on Site:

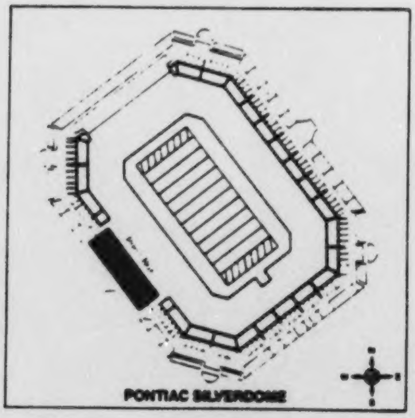
Total Site Size: 132 Acres

Transportation Split: Auto 83%
Transit 17%

On Site Parking: 10,500 Vehicles
400 Buses

Major Sports Tenants: Detroit Lions (NFL)
Detroit Express (NASL)
Michigan Panthers (USFL)
Detroit Pistons (NBA)

Population of Urban Area: 4,419,800



PROFILE OF EXISTING COVERED STADIA

Stadium Name: Seattle Kingdome

Owner: King County, Washington

Location: Downtown Seattle, Washington

Stadium Size: Baseball - 60,000
Football - 65,000

Construction Cost and Completion Date: $64 Million
Completed in 1976

Type of Dome Structure: Concrete

Other Sports or Tourist Facilities on Site:

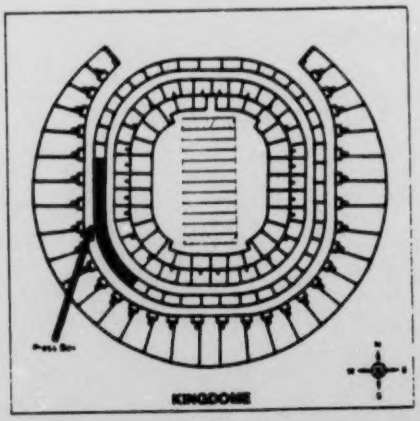
Total Site Size: 35 Acres

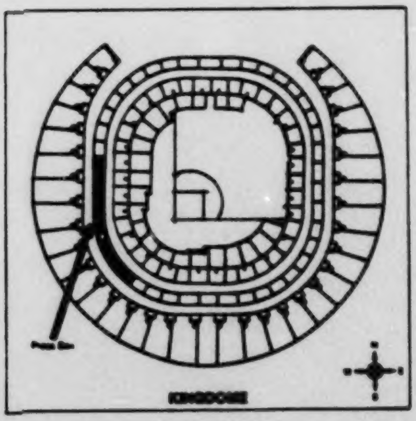
Transportation Split:

On Site Parking: 2,200 Vehicles

Major Sports Tenants:
Seattle Mariners (AL)
Seattle Seahawks (NFL)
Seattle Sounder (NASL)
Seattle Supersonics (NBA)

Population of Urban Area: 1,656,100





PROFILE OF EXISTING COVERED STADIA

Stadium Name: Superdome

Owner: State of Louisiana

Location: Downtown, New Orleans, Louisiana

Stadium Size: Baseball - 57,000
Football - 78,000

Construction Cost and Completion Date: $168 Million
Completed in August, 1975

Type of Dome Structure: Rigid Concrete and Steel Frame

Other Sports or Tourist Facilities on Site:

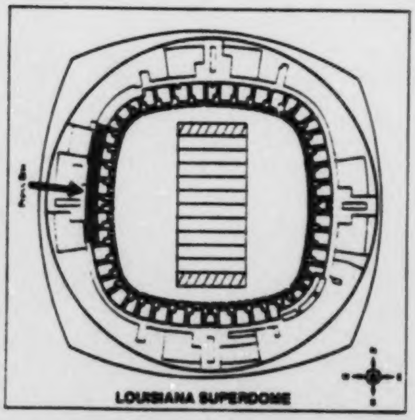
Total Site Size: 55 Acres

Transportation Split: Auto 55%
Transit 45%

On Site Parking: 5,100 Vehicles

Major Sports Tenants: New Orleans Saints (NFL)

Population of Urban Area: 1,304,900



PROFILE OF EXISTING COVERED STADIA

Stadium Name: Tacoma Dome

Owner: City of Tacoma

Location: Tacoma, Washington

Stadium Size: Baseball - N/A
Football - 25,000

Construction Cost and Completion Date: $32.3 Million
Completed in 1983

Type of Dome Structure: Varax Wood Dome

Other Sports or Tourist Facilities on Site:

Total Site Size:

Transportation Split:

On Site Parking:

Major Sports Tenants: No professional sports tenants

STADIUM STUDY COMMITTEE REPORT

APPENDIX IV Part ii

FACT SHEET ON SELECTED OPEN STADIA IN NORTH AMERICA

APPENDIX IV Part ii

COMPARATIVE DATA ON OPEN STADIA IN NORTH AMERICA

STADIUM NAME	LOCATION	CAPACITY (FOOTBALL) (BASEBALL)	PROFESSIONAL TENANTS	COMPLETION DATE	COST (MILLIONS)	POPULATION OF URBAN AREA (MILLIONS)	SURFACE
Olympic Stadium	Montreal, Quebec	60,000 59,000	Expos (NL) Alouettes (CFL)	1976	$564.0	1.76	Astroturf
Anaheim Stadium	Anaheim, California	69,000 65,000	Rams (NFL) Angels (AL)	1980*	$ 31.0	9.73	Natural Grass
Texas Stadium	Irving, Texas	65,000 N/A	Cowboys (NFL)	1971	$ 34.0	2.09	Texasturf
Riverfront Stadium	Cincinnati, Ohio	60,000 50,000	Bengals (NFL) Reds (NL)	1969	$ 41.0	1.41	Astroturf
Veterans Stadium	Philadelphia, Pennsylvania	65,000 57,000	Eagles (NFL) Phillies (NL)	1970	$ 50.0	4.69	Astroturf
Three Rivers Stadium	Pittsburgh, Pennsylvania	59,000 54,000	Steelers (NCL) Pirates (NL)	1968	$ 35.0	2.18	3-M Tartan Turf
Busch Memorial Stadium	St. Louis, Missouri	51,000 50,000	Cardinals (NFL) Cardinals (NL)	1966	$ 30.5	1.81	Astroturf
Atlanta-Fulton County Stadium	Atlanta, Georgia	60,000 53,000	Falcons (NFL) Braves (NL)	1966	$ 16.5	2.26	Natural Grass
Yankee Stadium	New York, New York	N/A 58,000	Yankees (AL)	1976*	$ 91.4	8.11	Natural Grass

* Renovation & Expansion

STADIUM STUDY COMMITTEE REPORT

APPENDIX V

DESCRIPTION OF PROPOSED STADIUM DESIGNS

STADIUM STUDY COMMITTEE REPORT

APPENDIX V

DESCRIPTION OF SELECTED STADIUM DESIGNS

AIR ROOFS CANADA
JAN BOBROWSKI AND PARTNERS
A.N. CHAPMAN LTD. AND R.V. ANDERSON
DAF INDAL LTD.
EASTERN CONSTRUCTION CO. LTD./BARTON—MALOW OF CANADA INC.
GEIGER BERGER
PHILLIPS BARRATT
SKIDMORE, OWINGS AND MERRILL
STADIUM CONSORTIUM (BREGMAN AND HAMANN)
ULTRADOME CONSORTIUM

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DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Air Roofs Canada
Peter L.E. Goering
Air Roofs Canada
36 Madison Avenue
Toronto, Ontario
M5R 2S1
(416) 924-6541

CAPACITY: 60,000

EXPECTED COST:

ROOF: Rapidly moving air jets generating an "Air-Curtain"

DIMENSIONS: **STRUCTURE -**

ROOF - 100m (330') diameter air roof system

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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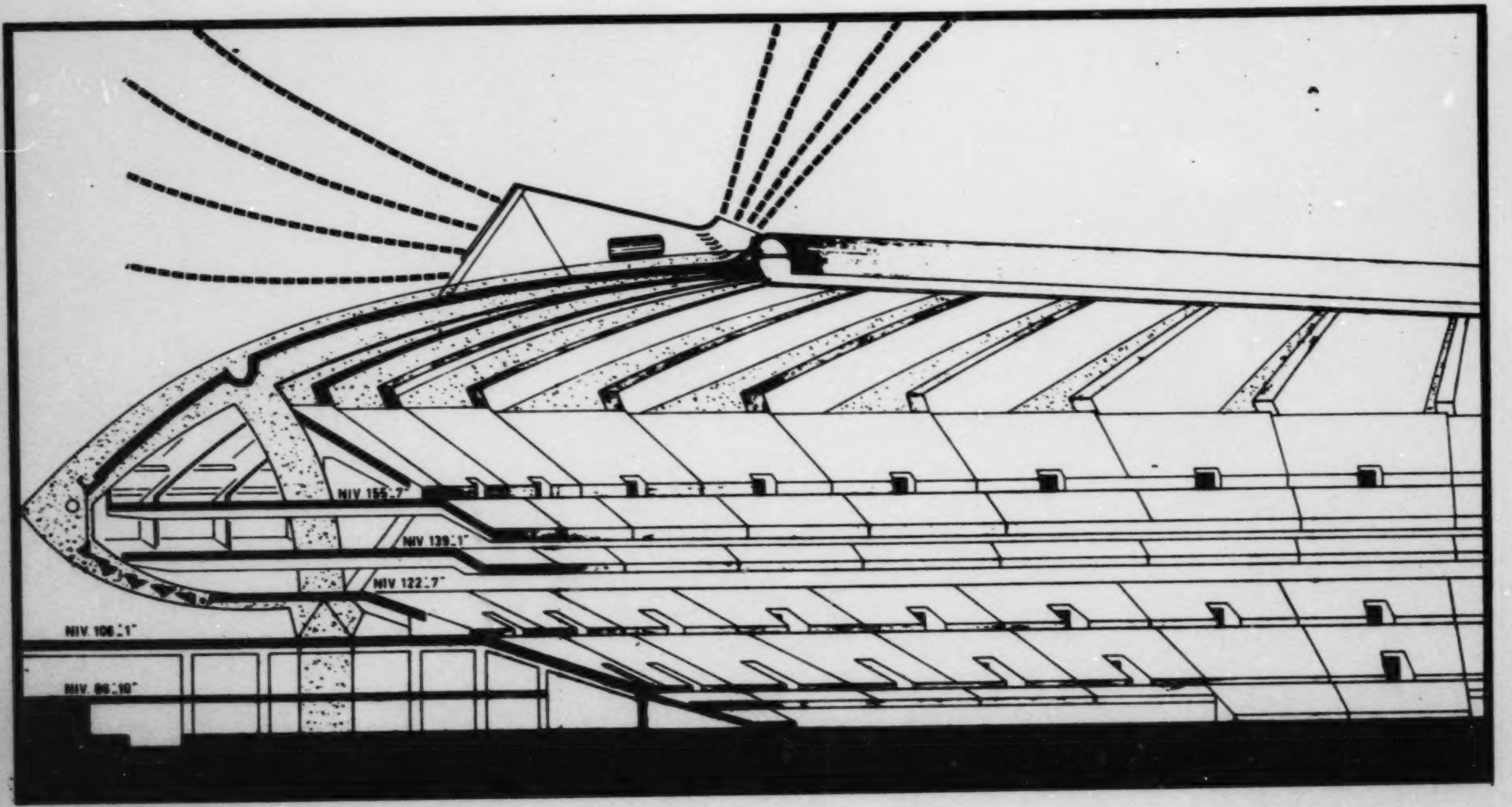
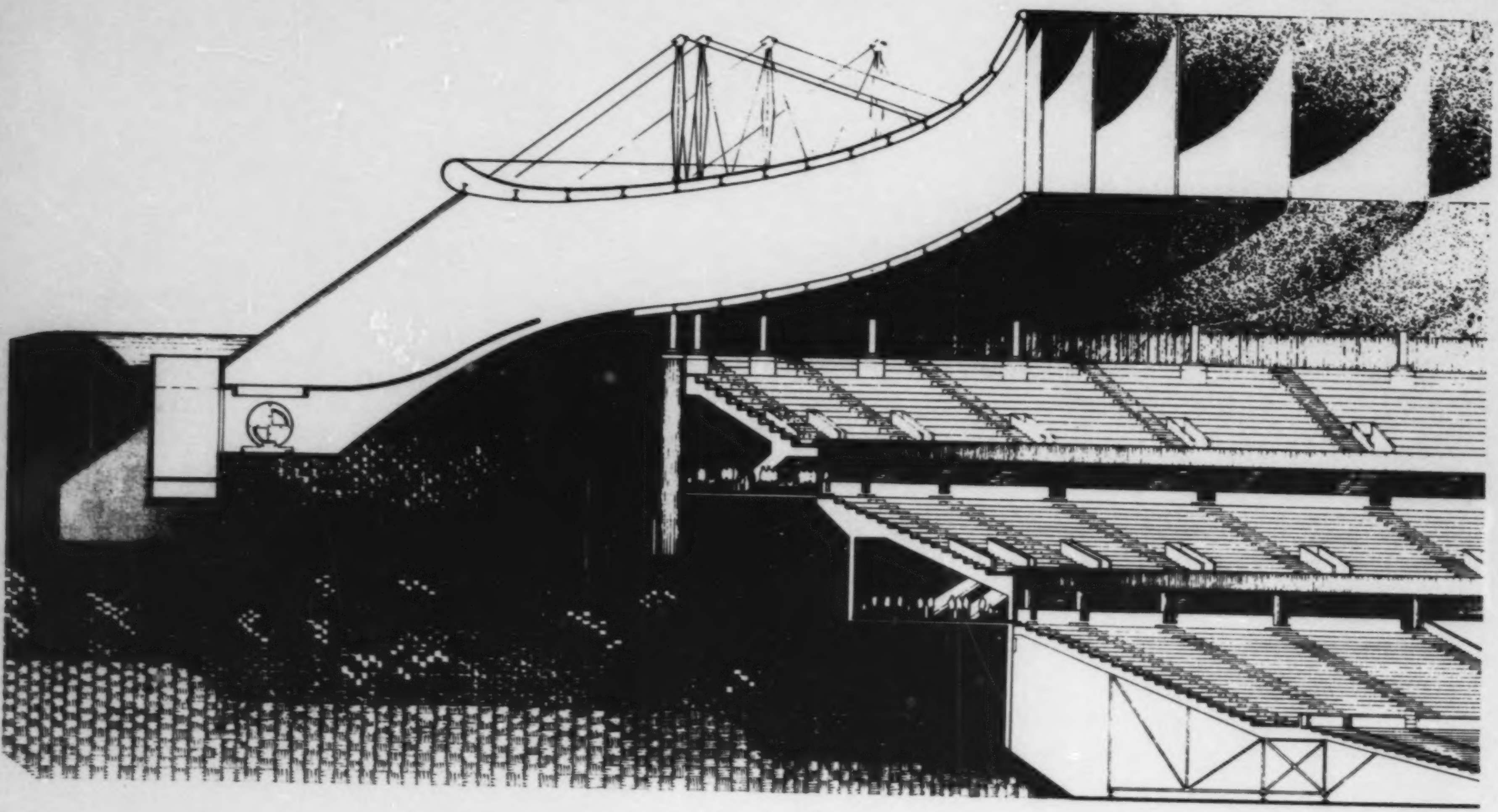


AIR ROOFS CANADA



AIR ROOFS CANADA

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Jan Bobrowski & Partners Ltd.
Jan Bobrowski
President
1004 - 8th Avenue S.E.
Calgary, Alberta
T2G 0M4
(403) 261-3748

CAPACITY:

EXPECTED COST: $141,000,000

ROOF: Transparent structural triple skinned polycarbonate supported by a suspended stressed net with central retractable sections

DIMENSIONS: STRUCTURE - 230m (750') diameter

ROOF - Retractable section 100 m X 100 m (330' X 330')

EXAMPLE OF OTHER SIMILAR STRUCTURES: Calgary Olympic Coliseum (not retractable)

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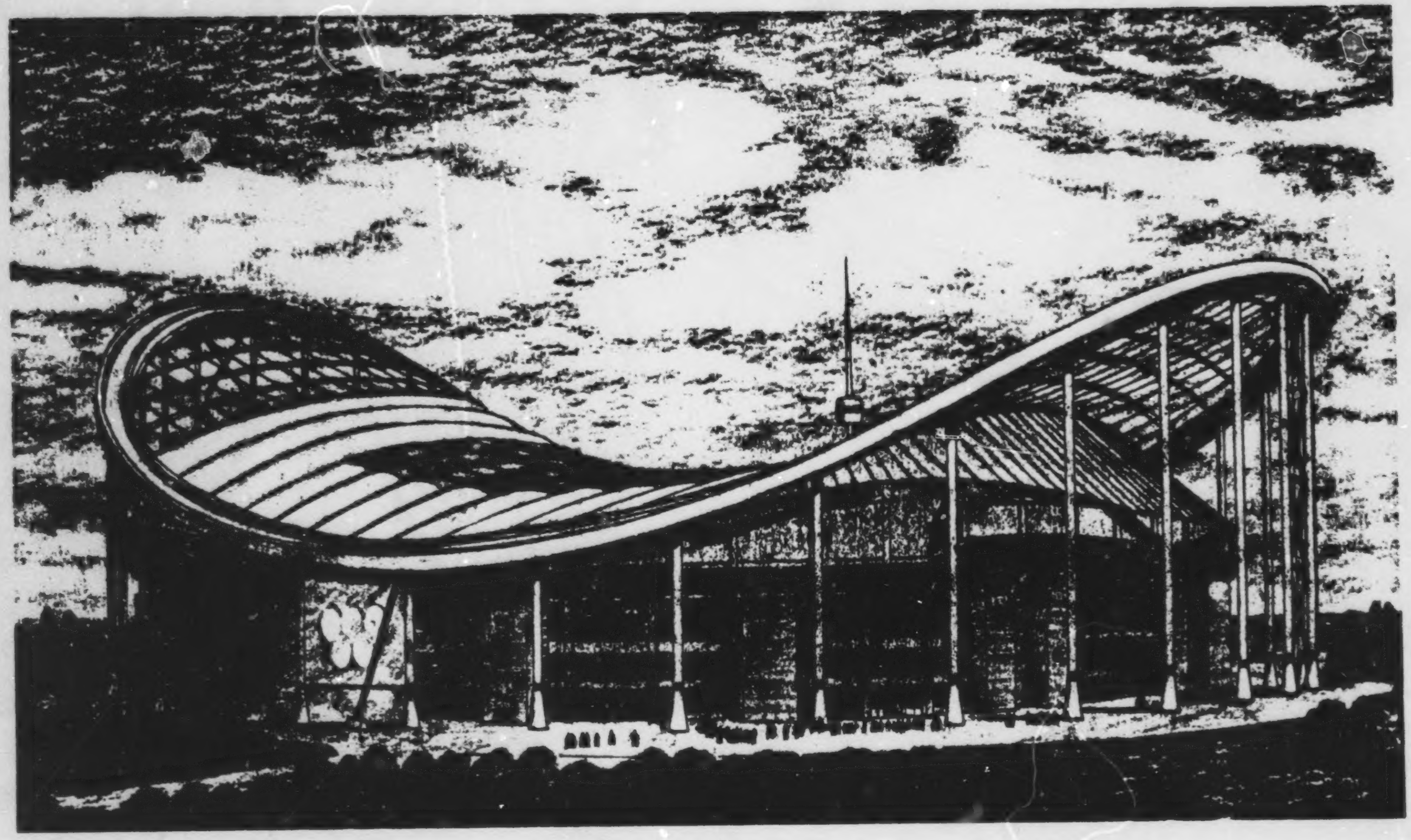
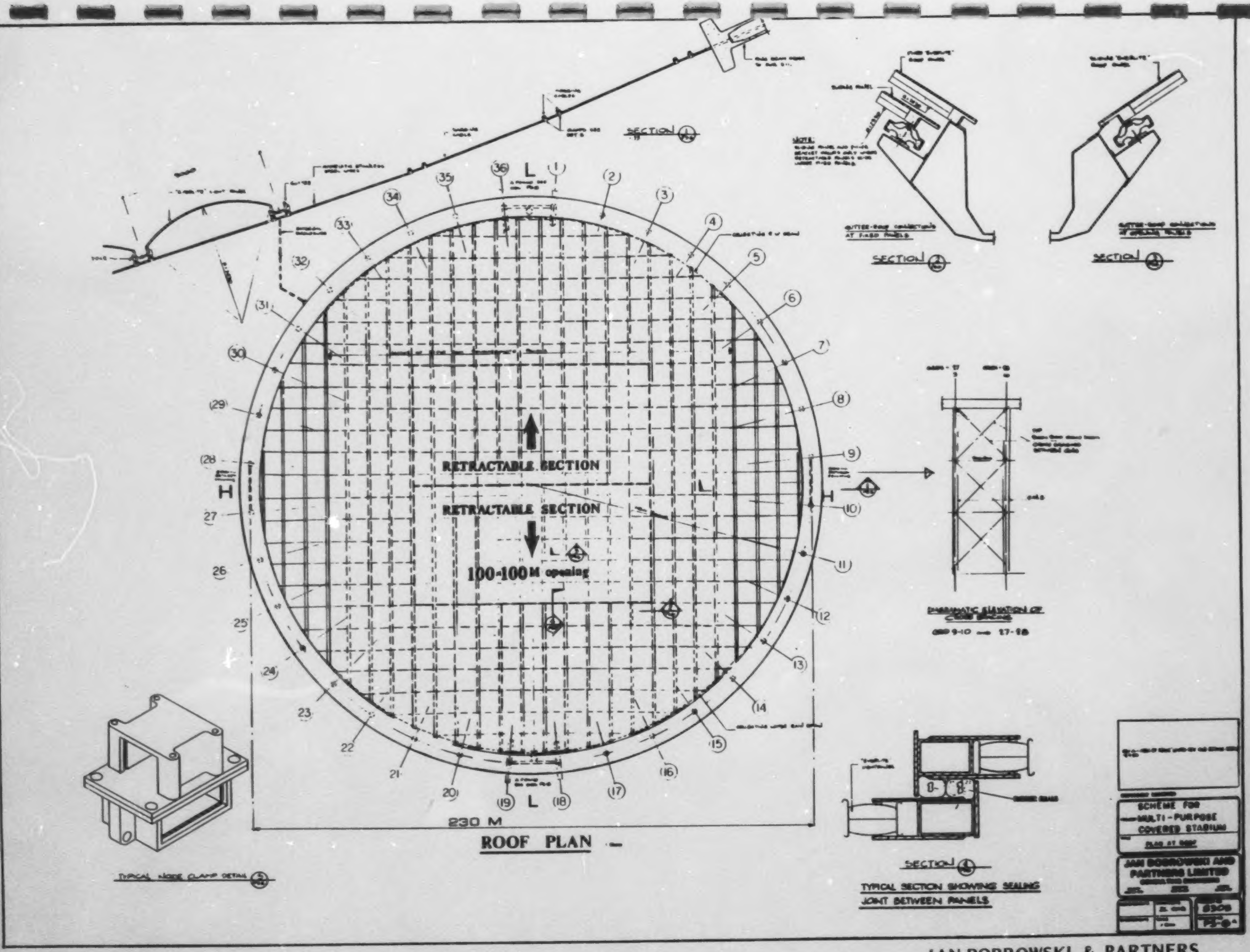


JAN BOBROWSKI & PARTNERS



ROOF PLAN

TYPICAL NODE CLAMP DETAIL

TYPICAL SECTION SHOWING SEALING JOINT BETWEEN PANELS

JAN BOBROWSKI & PARTNERS

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Albert N. Chapman - Ontario World Centre
President
A.N. Chapman Ltd.
200 Consumers Road
Willowdale, Ontario
M2J 4R4
(416) 494-6826

CAPACITY:

EXPECTED COST:

ROOF: Two movable roof sections - metal arch spans covered with tension mounted fabric

DIMENSIONS: STRUCTURE - 916' long when fully retracted

ROOF - Fully retractable 458'
Each section 229' long

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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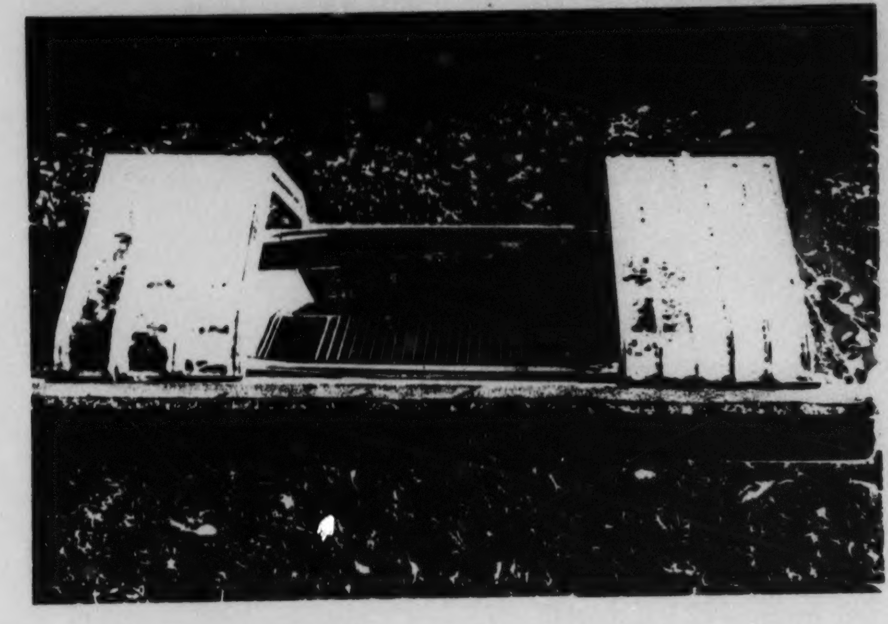
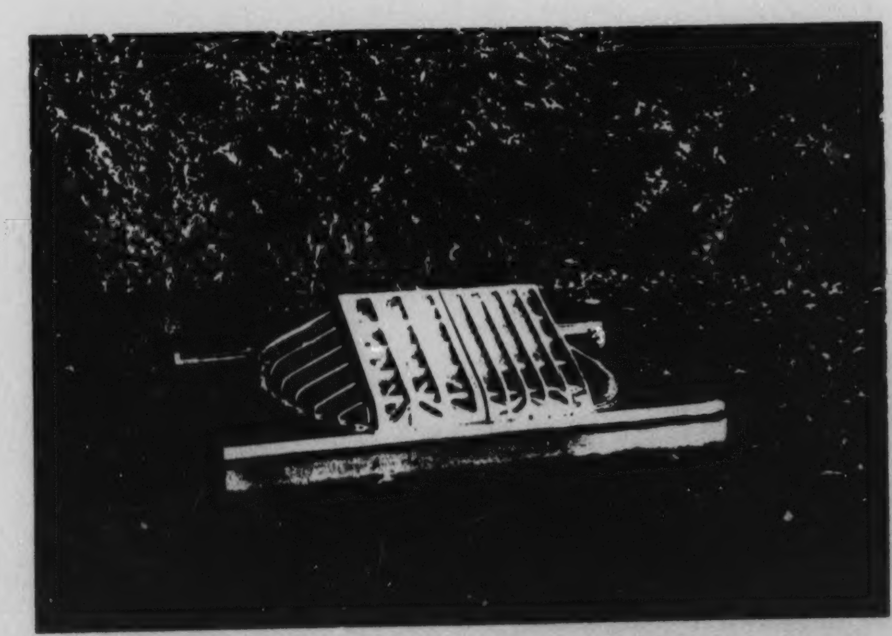


Side view, roof fully open, showing lighting at dusk.

A. N. CHAPMAN & R. V. ANDERSON



Retractable roof closed - side view.

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: DAF INDAL Ltd.*
G.R. Rutledge
President
3570 Hawkestone Road
Mississauga, Ontario
L5C 2V8
(416) 275-5300

a) Stardome
b) Rolltop Roof
c) Telescoping Roof

CAPACITY:

EXPECTED COST:

ROOF:
a) Space frame structure with six pie shaped retractable sections
b) Space frame structure consisting of two sliding panels supported arches
c) Two telescoping, rectangular shaped, barrel arch space frames

DIMENSIONS: STRUCTURE -
a) 736' length X 205' breadth
150' overall height
b) Not specified
c) Not specified

ROOF -
a) Retractable section 115,745 sq. ft.
b) Each panel 600' X 300', uncovered area dependent on stadium design
c) Each panel 600' X 400', uncovered area 600' X 600' when panels retracted

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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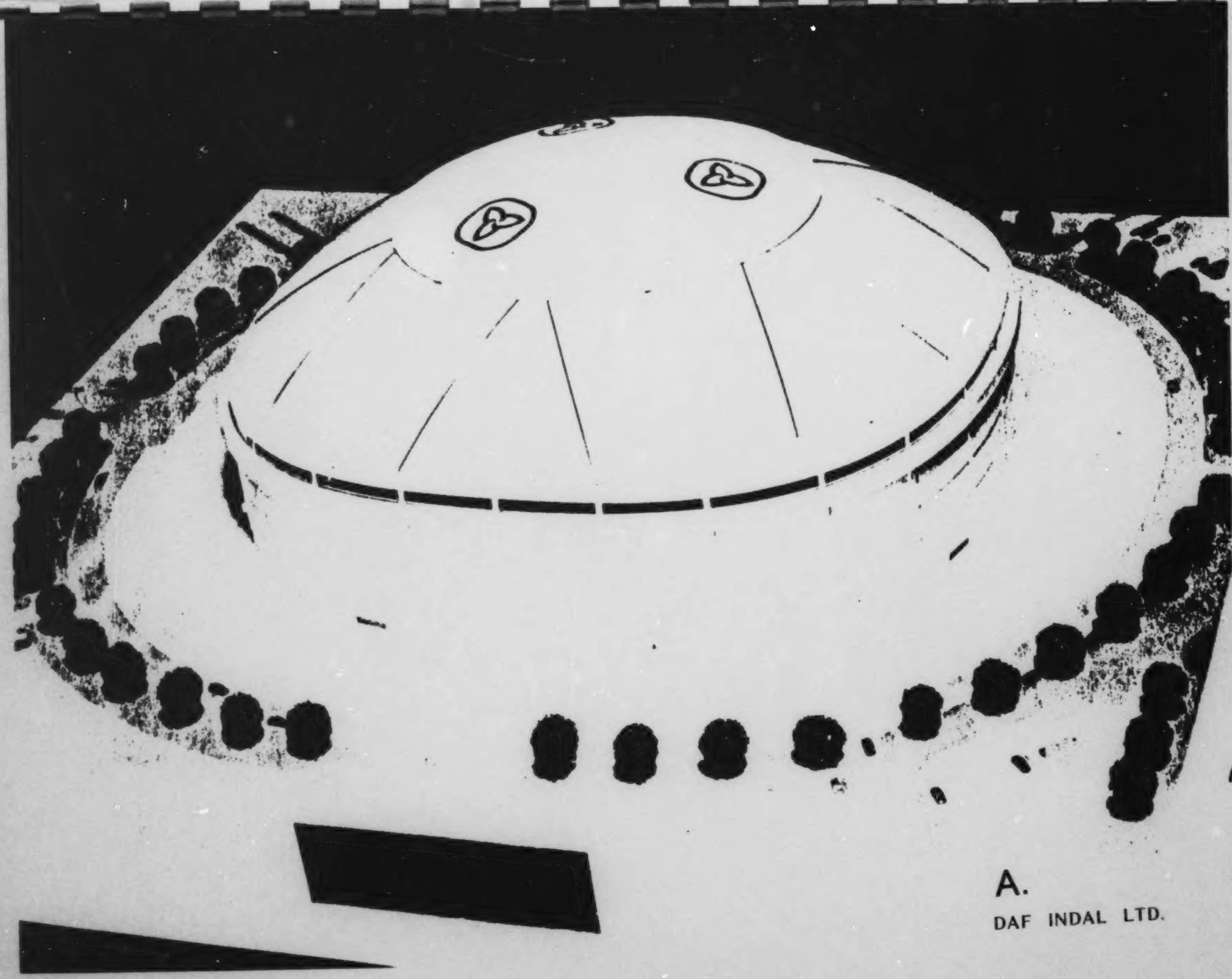
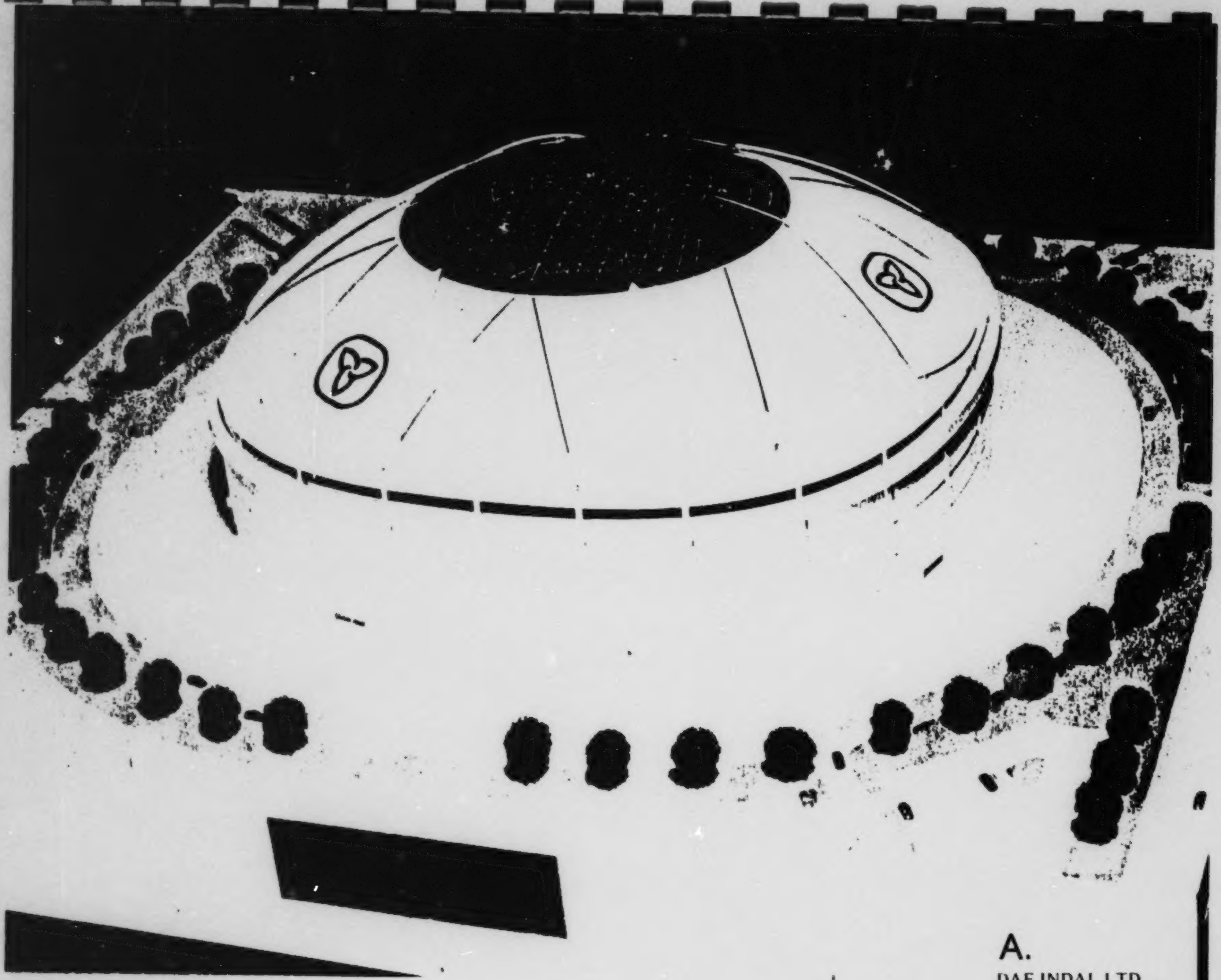
* Three structure designs were submitted by DAF INDAL Ltd.



A.

DAF INDAL LTD.



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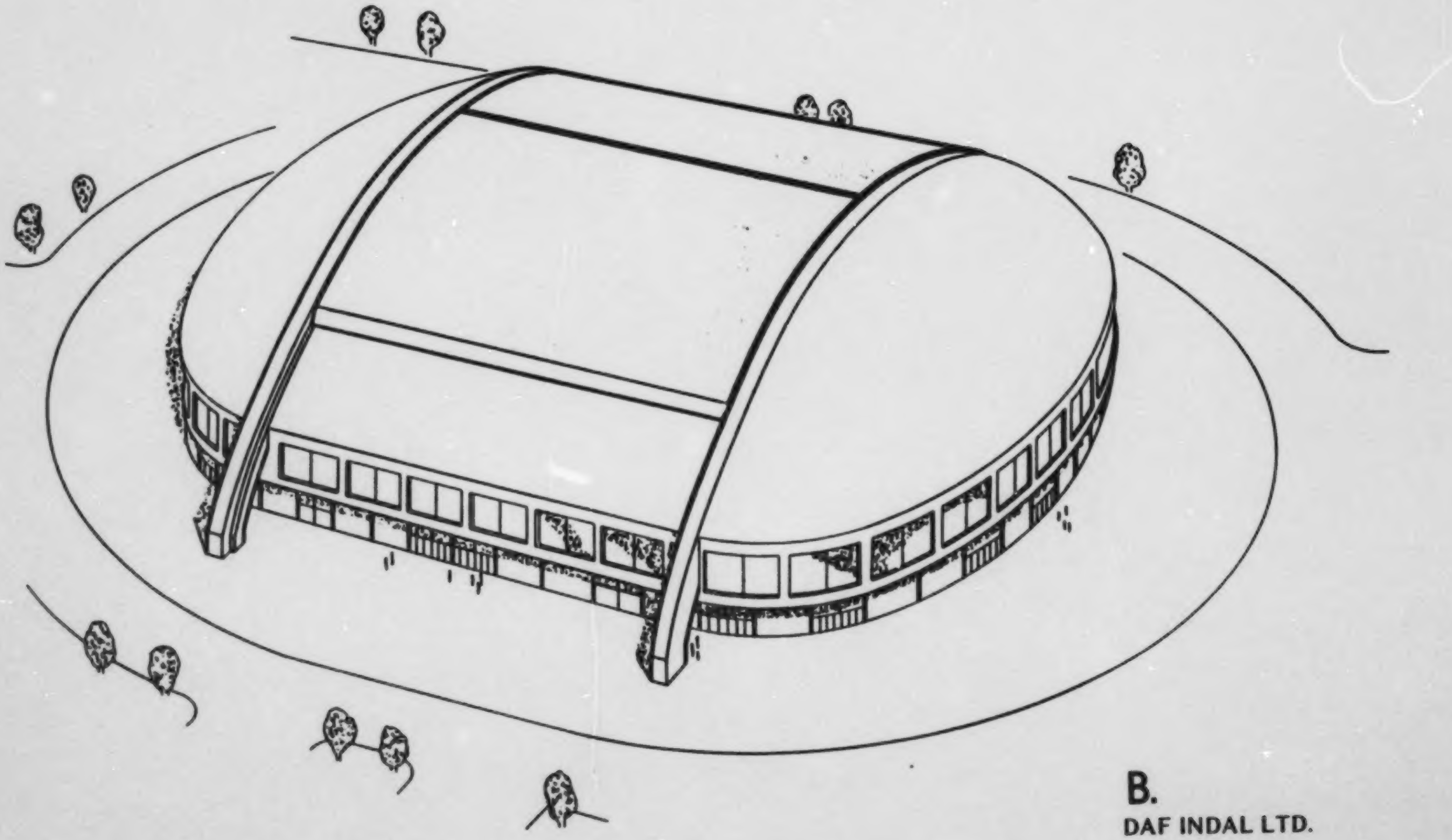
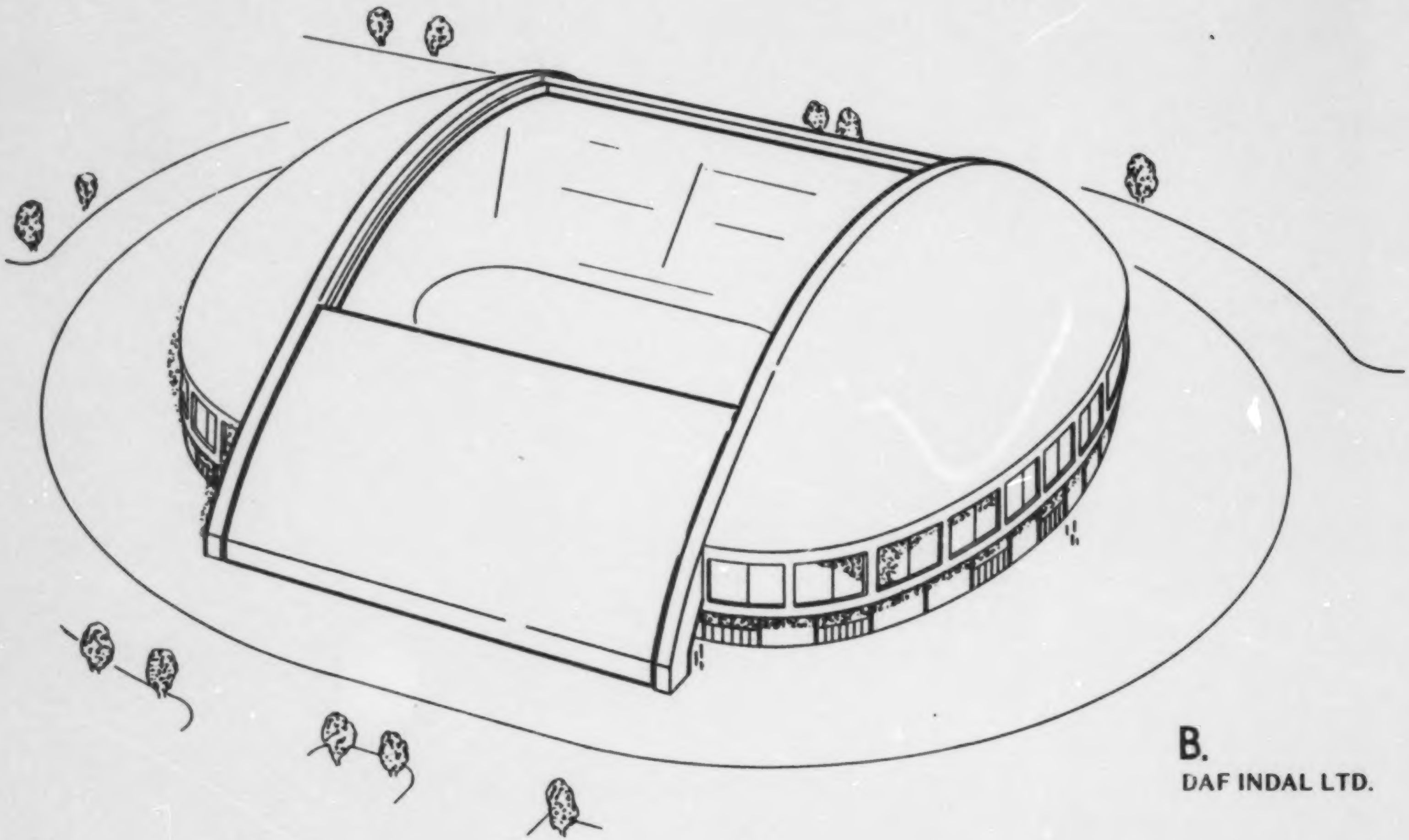
DAF INDAL LTD.



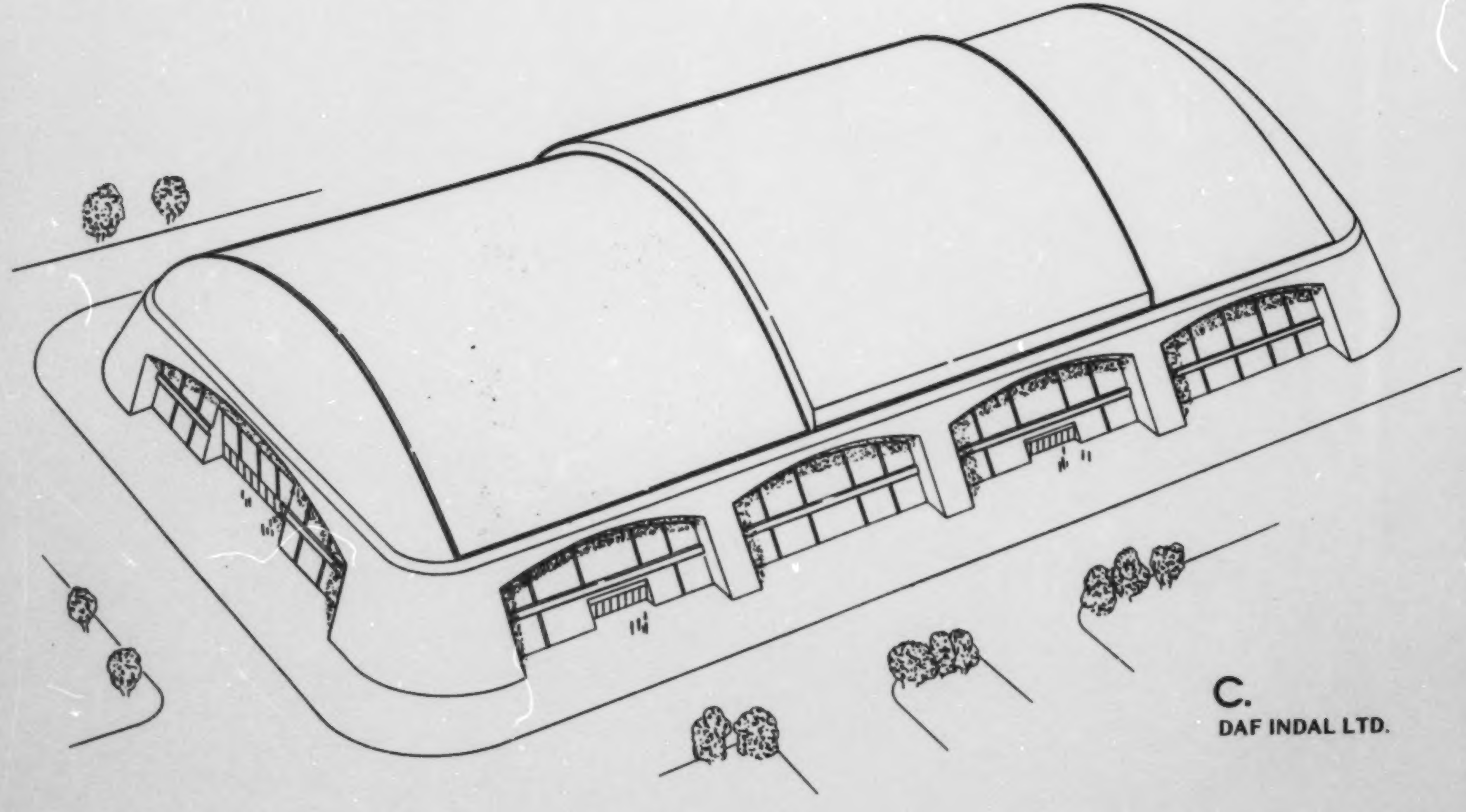
B.

DAF INDAL LTD.



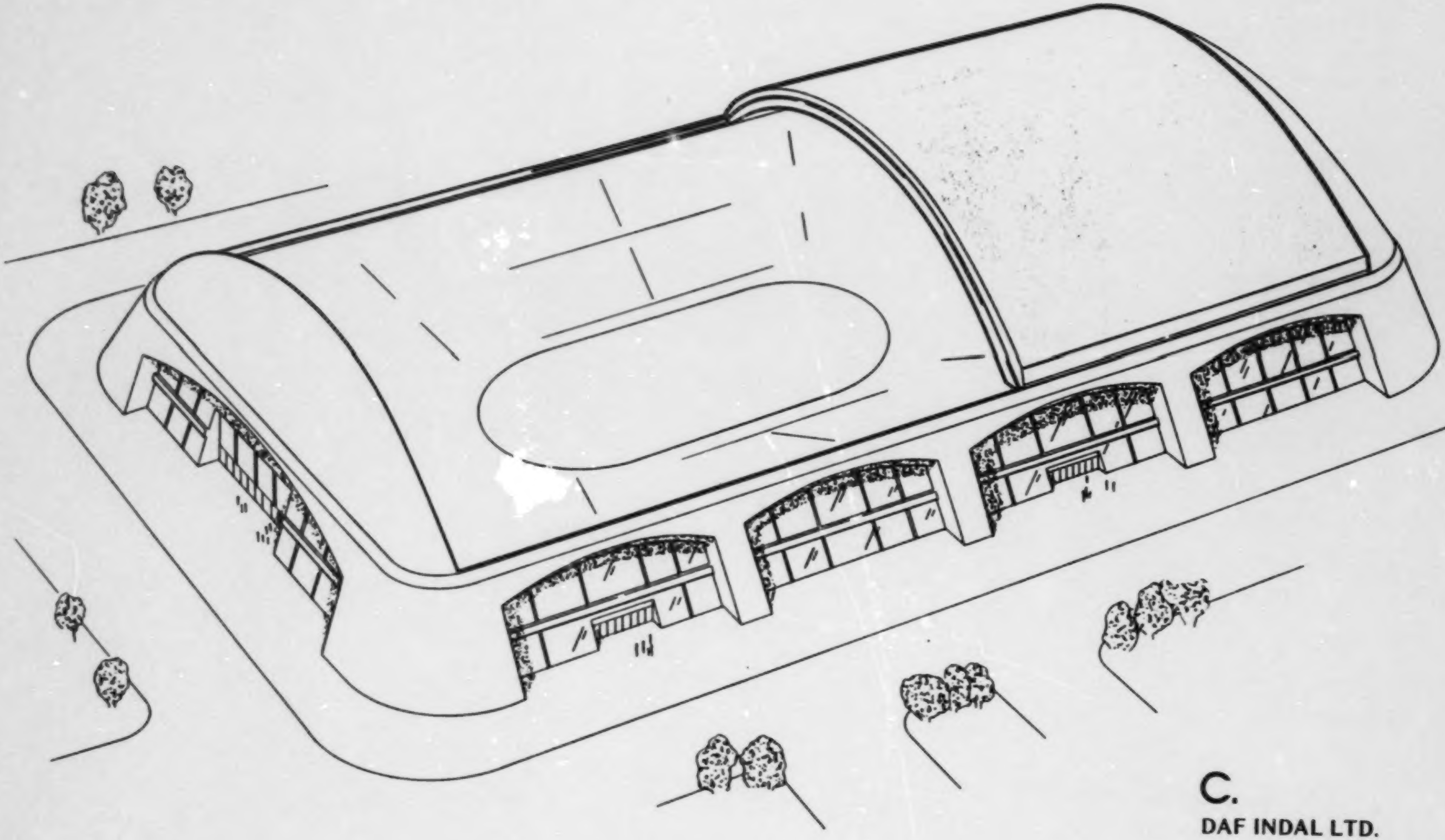
B.

DAF INDAL LTD.



C.

DAF INDAL LTD.



C.
DAF INDAL LTD.

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Eastern Construction Co. Ltd./
Barton-Malow of Canada Inc.

E.G. Odette
President
Eastern Construction Co. Ltd.
P.O. Box 440, Station "Q"
Toronto, Ontario
M4T 2R8

CAPACITY: 70,250

EXPECTED COST: $108,550,000

ROOF: Cable tension roof and provision to open and close a 300 foot diameter area

DIMENSIONS: STRUCTURE -

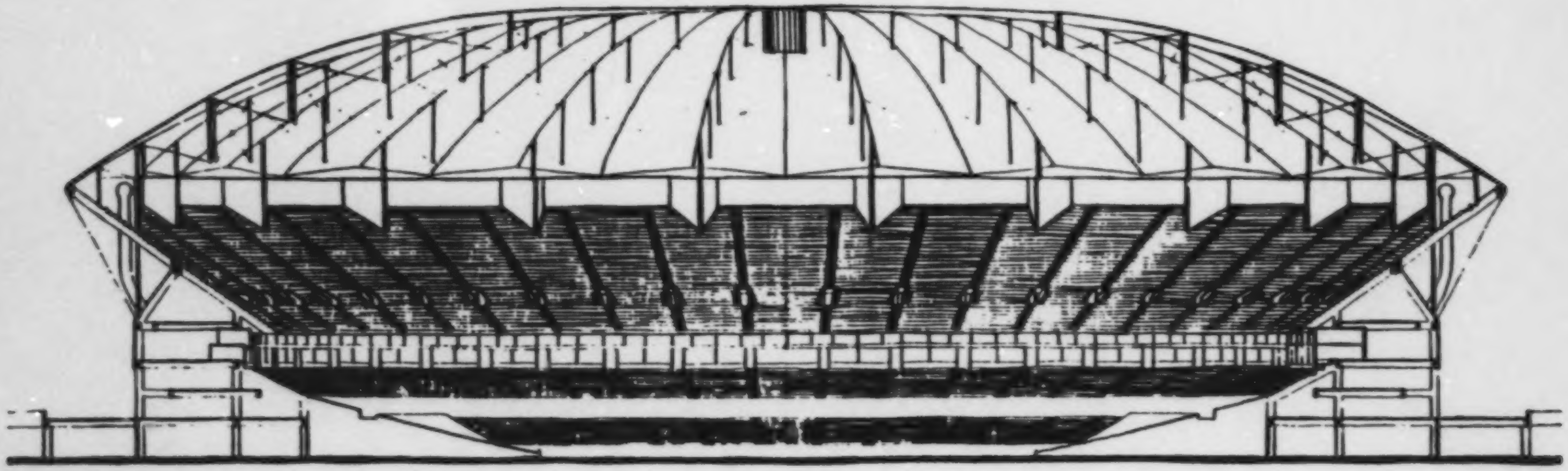
ROOF -

EXAMPLE OF OTHER SIMILAR STRUCTURES: *Pontiac Silverdome, Pontiac Michigan
Hubert H. Humphrey Metrodome, Minneapolis, Minnesota

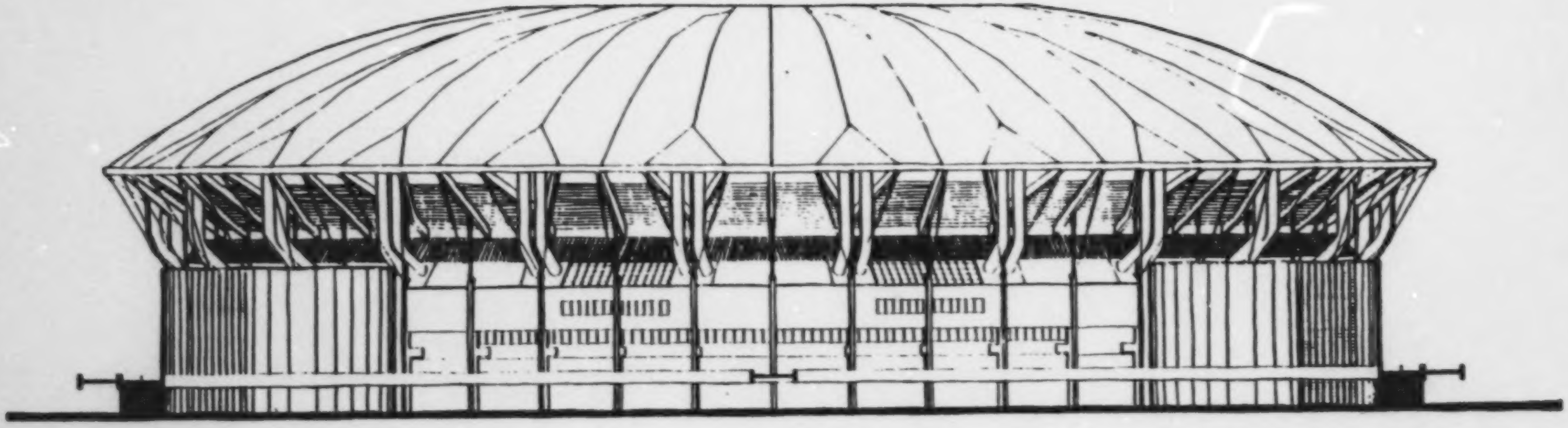
NOTE: The concepts, analyses and designs included within this report remain the property of the above proponent. The reproduction of their material in this document is solely for information purposes and is not an endorsement of any aspect of the proposal.

*None of these stadia have the retractable roof feature

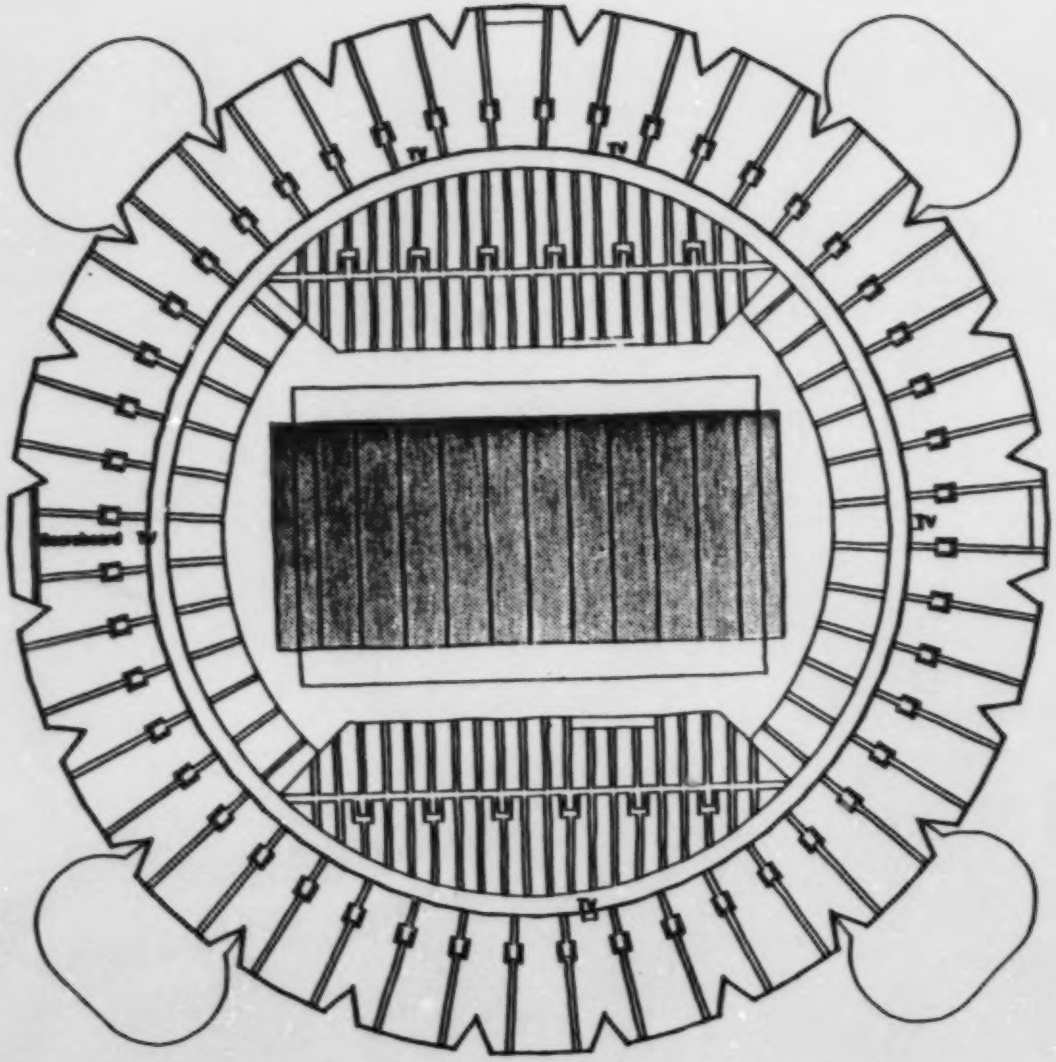
EASTERN CONSTRUCTION AND BARTON – MALOW



STADIUM SECTION



STADIUM ELEVATION



SEATING PLAN — FOOTBALL AND SOCCER 70,250 seats EASTERN CONSTRUCTION AND BARTON – MALOW

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Geiger Berger

David H. Geiger
Geiger Berger Structures, Inc.
2236 West 12th Ave.
Vancouver, B.C
V6K 2N7
(604) 736-8761

CAPACITY: 60,000

EXPECTED COST:

ROOF: Teflon fabric translucent roof with 300 foot diameter retractable section. (Expandable to 400 foot diamter)

DIMENSIONS:

STRUCTURE - Not stated

ROOF - Not stated

EXAMPLE OF OTHER SIMILAR STRUCTURES: * B.C. Place
Hoosier Dome

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* None of these Stadia have the retractable roof feature.

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Phillips Barratt
2150 West Broadway
Vancouver, B.C.
VK6 4L9
(604) 734-4221

CAPACITY: 60,000

EXPECTED COST: $191,950,000

ROOF: Aluminum space - frame with retractable sections

DIMENSIONS: STRUCTURE -

ROOF -

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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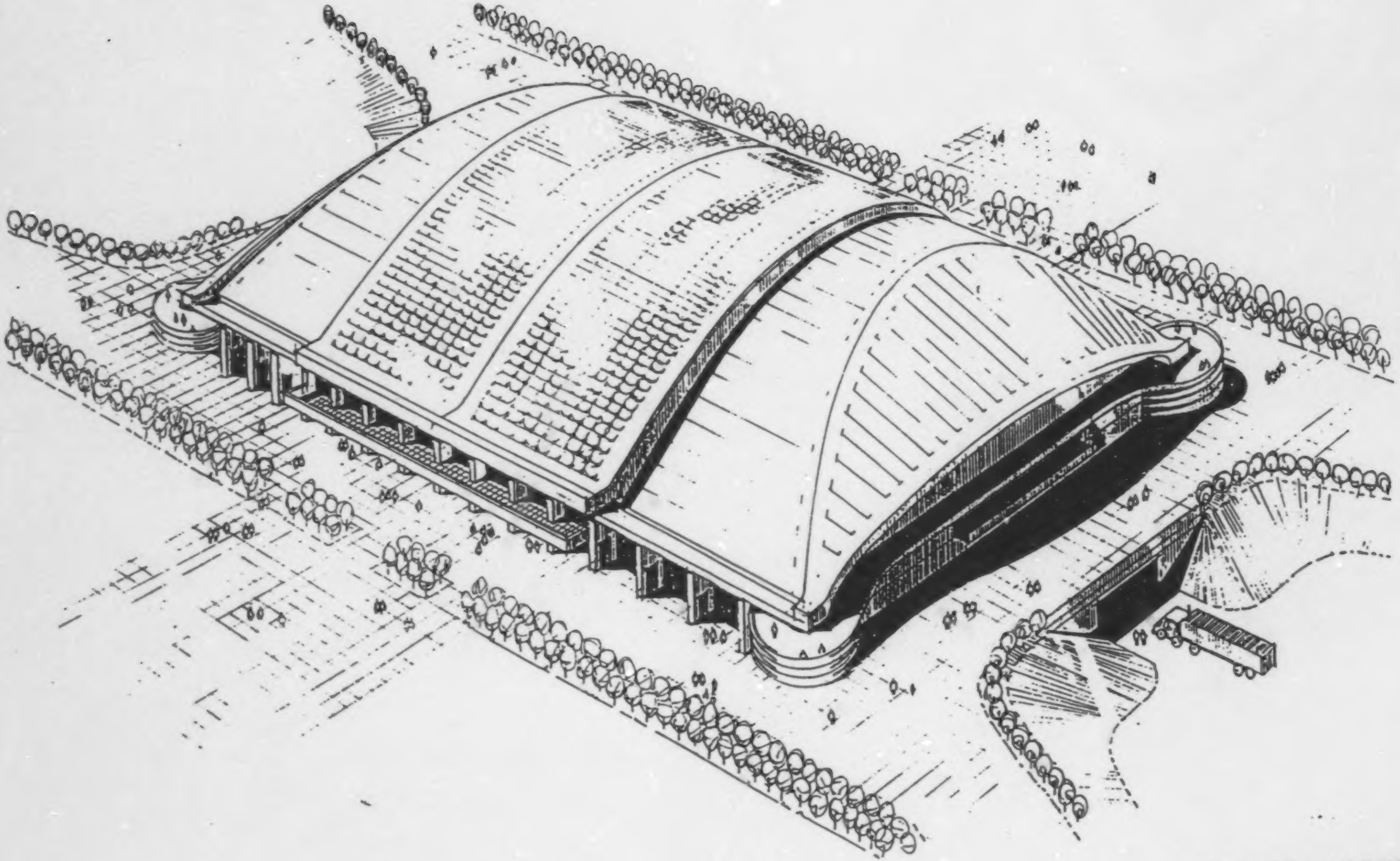
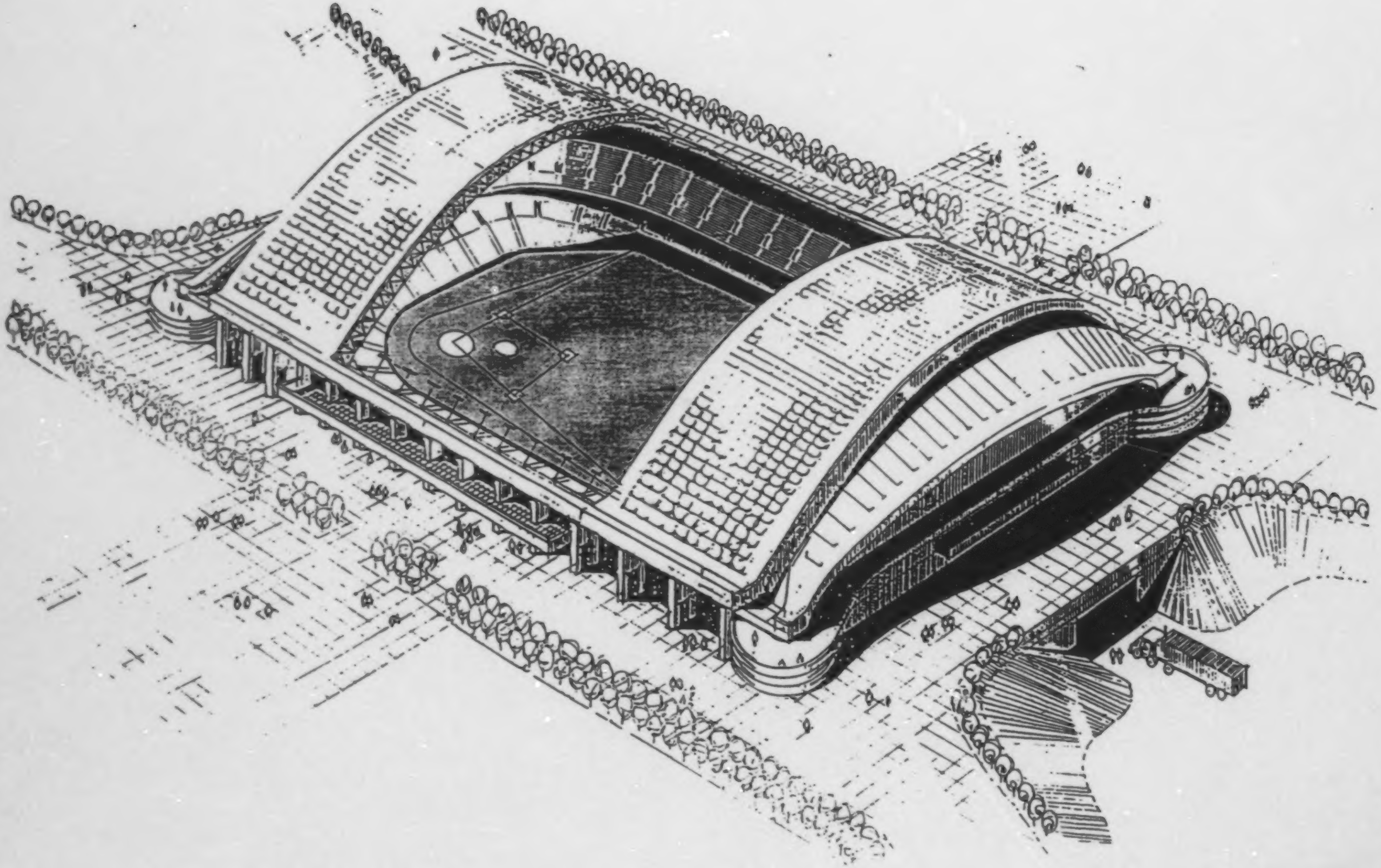
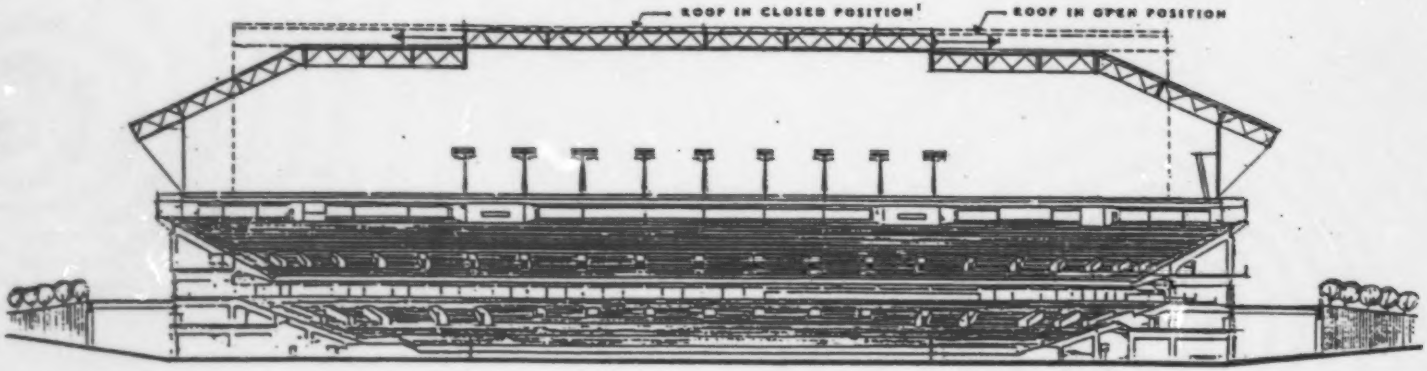


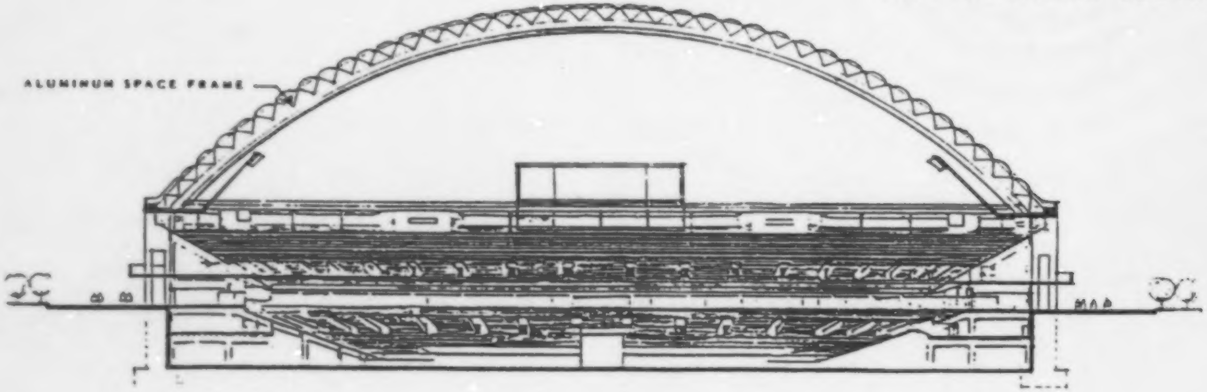
PHILLIPS BARRATT



PHILLIPS BARRATT



LONGITUDINAL SECTION



CROSS SECTION

PHILLIPS BARRATT

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Skidmore, Owings & Merrill
Mr. Hal Dyangar and Mr. Stan Korista

CAPACITY: 60,000

EXPECTED COST:

ROOF: Tension fabric/retractable roof
Fabric - teflon/silicone coated fibreglass
Dual layer cable grid suspension system

DIMENSIONS: STRUCTURE - 720' diameter stadim structure
195' clear height from field level

ROOF - 320' X 320' central retractable roof section

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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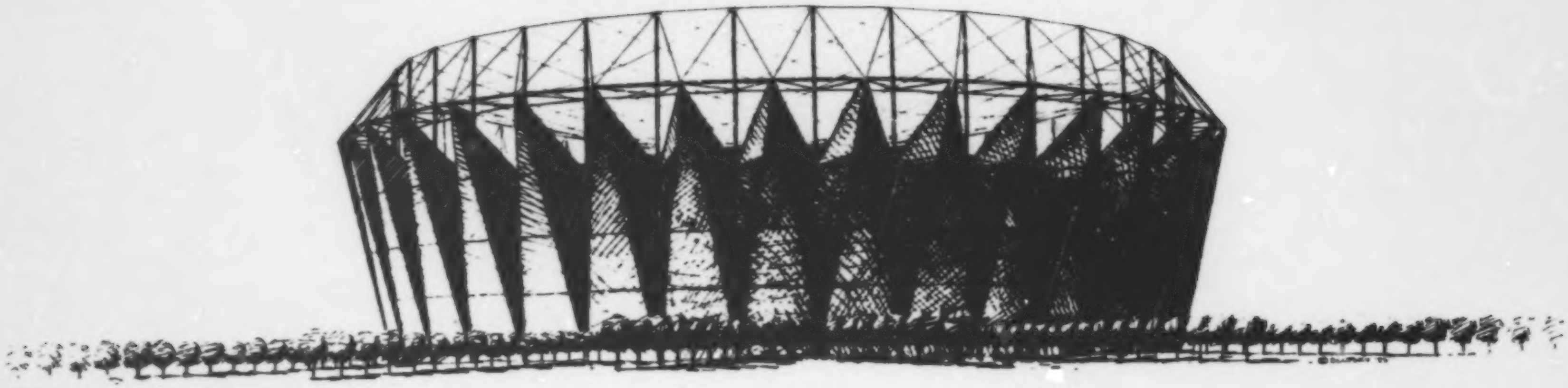
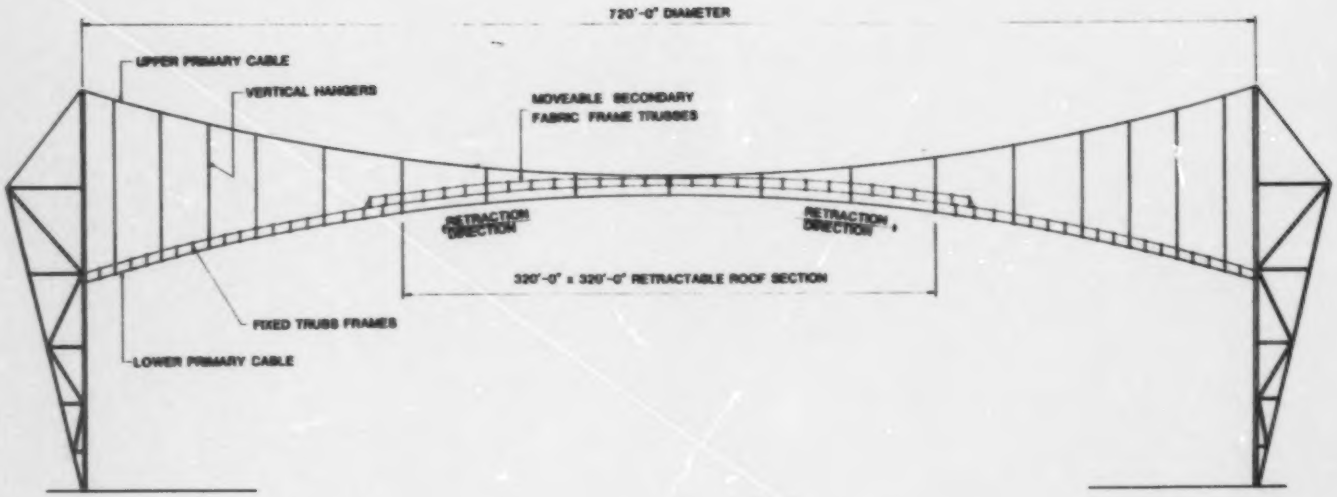
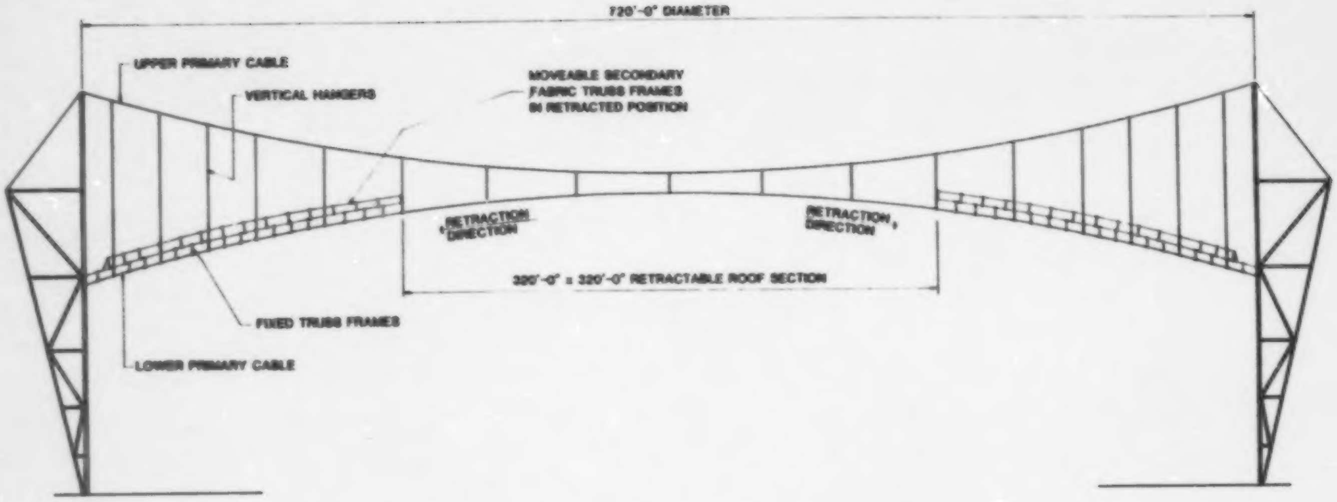


SKIDEMORE, OWINGS & MERRILL



Retractable Tension Fabric Roof
North–South Section: Roof Closed

SKIDEMORE, OWINGS & MERRILL



Retractable Tension Fabric Roof
North South Section: Roof Open

SKIDEMORE, OWINGS & MERRILL

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: The Stadium Consortium
David C. Scott
The Bregman & Hamann Partnership
50 Gervais Drive
Don Mills, Ontario
(416) 449-7500

CAPACITY: 70,500

EXPECTED COST: $135,678,000

ROOF: Structural steel trusses covered with a teflon coated fibreglas fabric

DIMENSIONS: STRUCTURE - 193.5 m X 246.5 m (635' X 808')
65.5 m (215') height above grade

ROOF - 24,410 m^2 (262,800 sq. ft.) opening
54.9 m (180') clear height from field level

EXAMPLE OF OTHER SIMILAR STRUCTURES:

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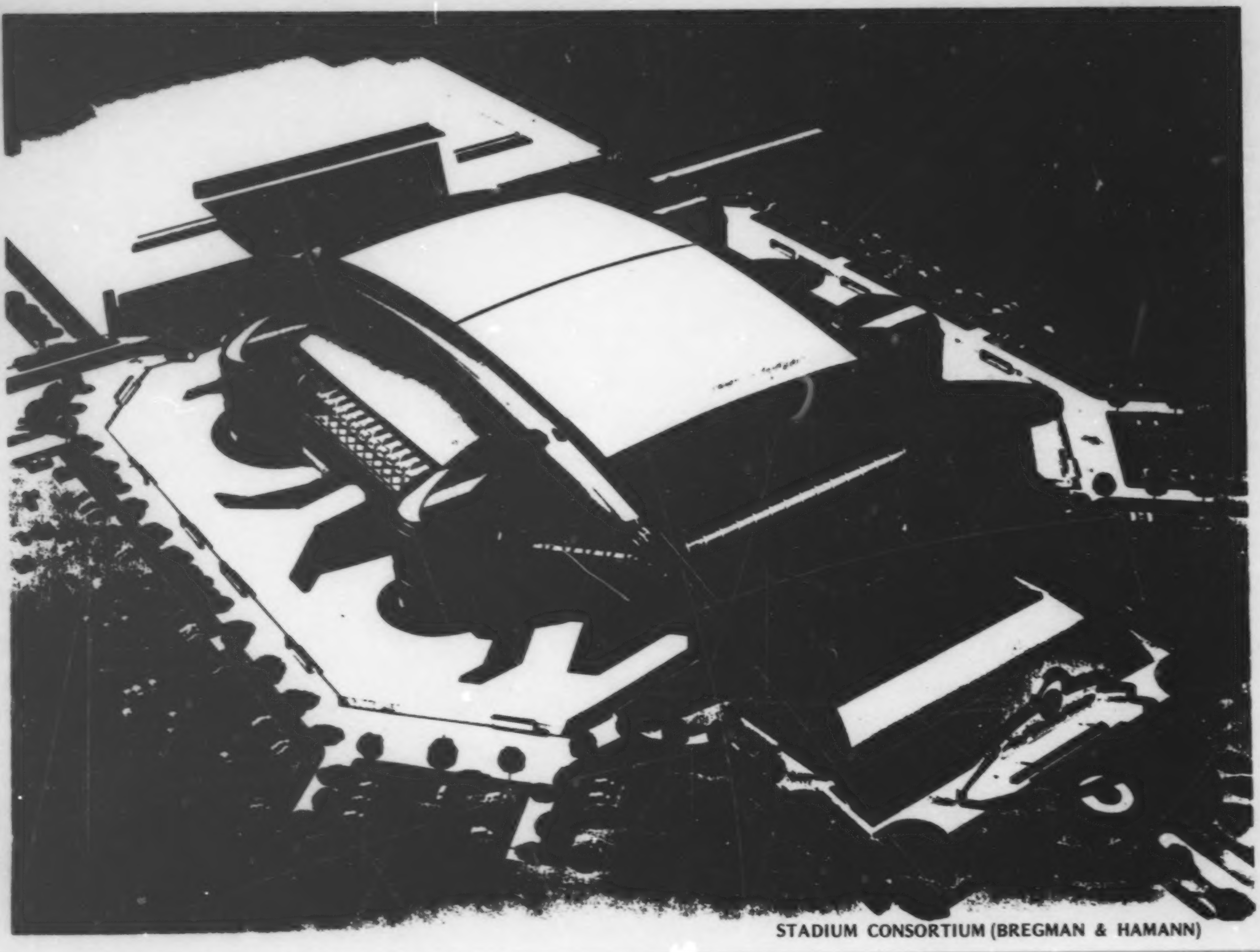
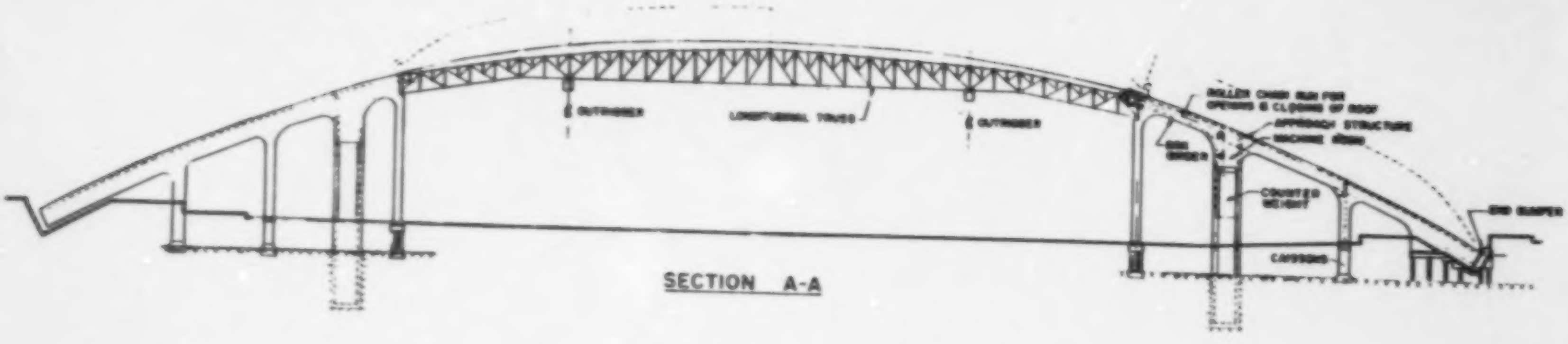
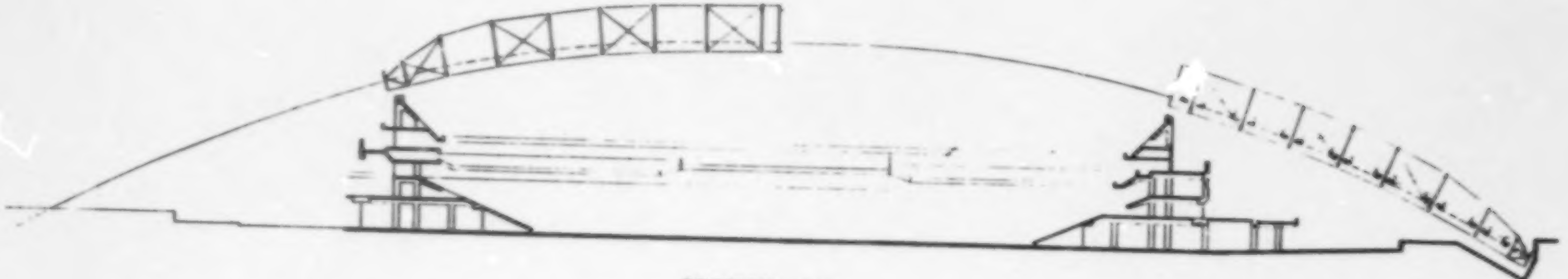


STADIUM CONSORTIUM (BREGMAN & HAMANN)

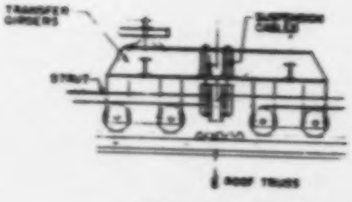
STADIUM CONSORTIUM (BREGMAN & HAMANN)



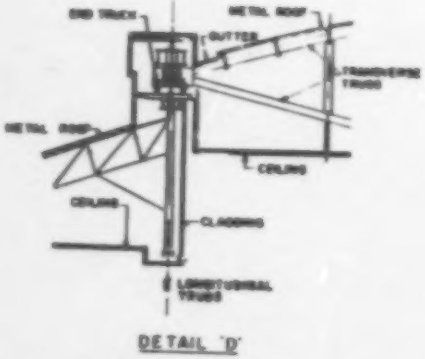
SECTION A-A



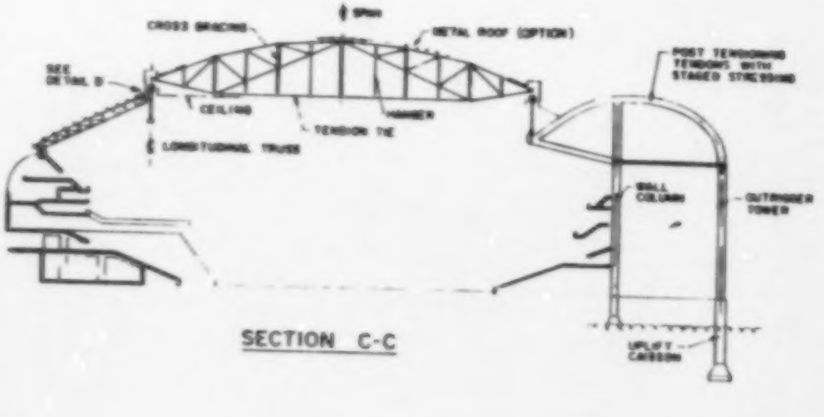
SECTION B-B



LARGE SCALE DETAIL OF END TRUCK



DETAIL 'D'



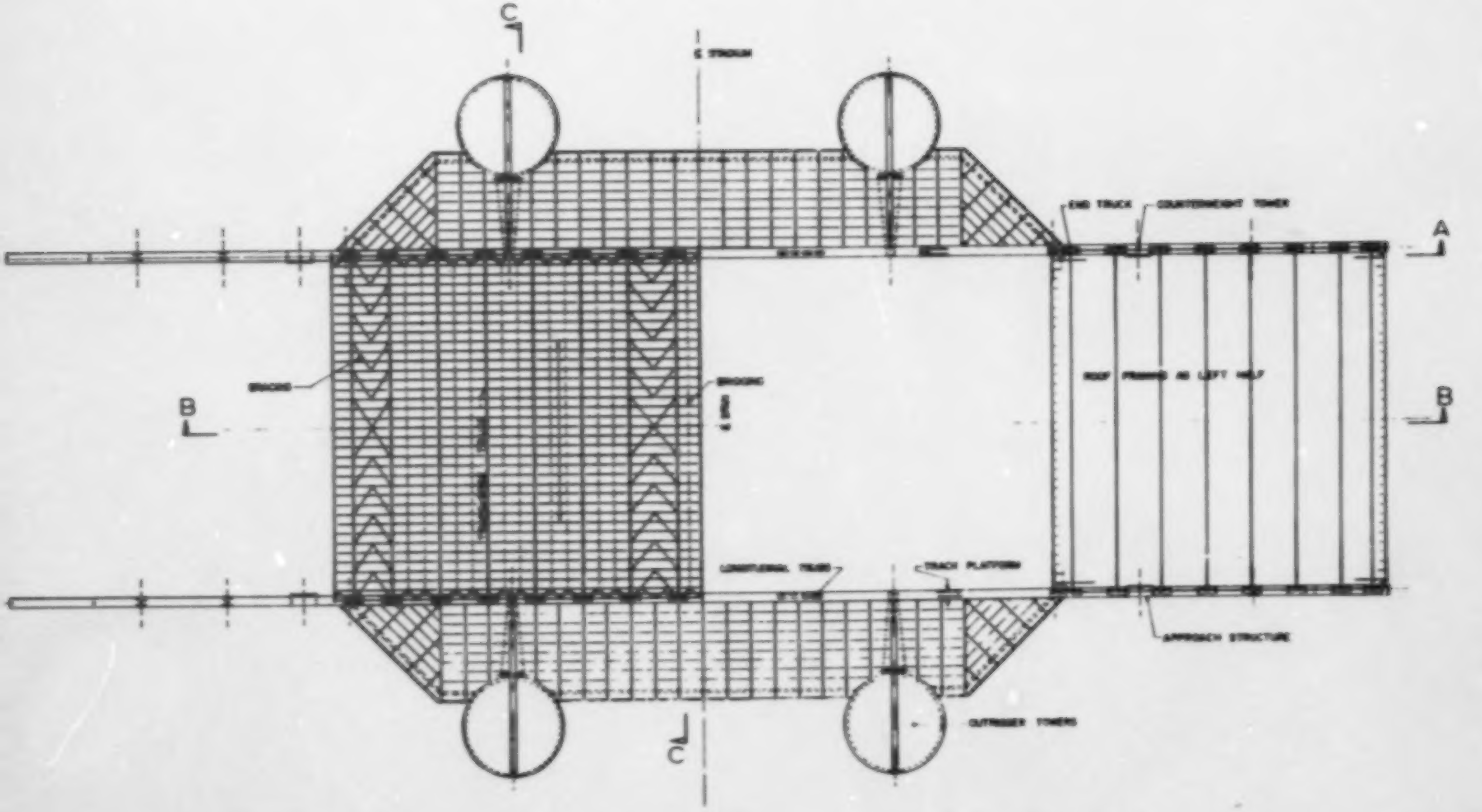
SECTION C-C

STRUCTURAL

SEPTEMBER 30, 1983

Pat. Pending

STADIUM CONSORTIUM
(BREGMAN & HAMANN)



CLOSED POSITION

OPEN POSITION

ROOF FRAMING PLAN

STADIUM CONSORTIUM
(BREGMAN & HAMANN)

STRUCTURAL

SEPTEMBER [illegible]

Pat. Pending

DETAILS OF STADIUM DESIGN PROPOSALS

PROPONENT: Ultradome Consortium
Allan V. Orr
Vice-President
Atlas Steels
P.O. Box 1000
Welland, Ontario
L3B 5R7
(416) 869-3973

CAPACITY:

EXPECTED COST:

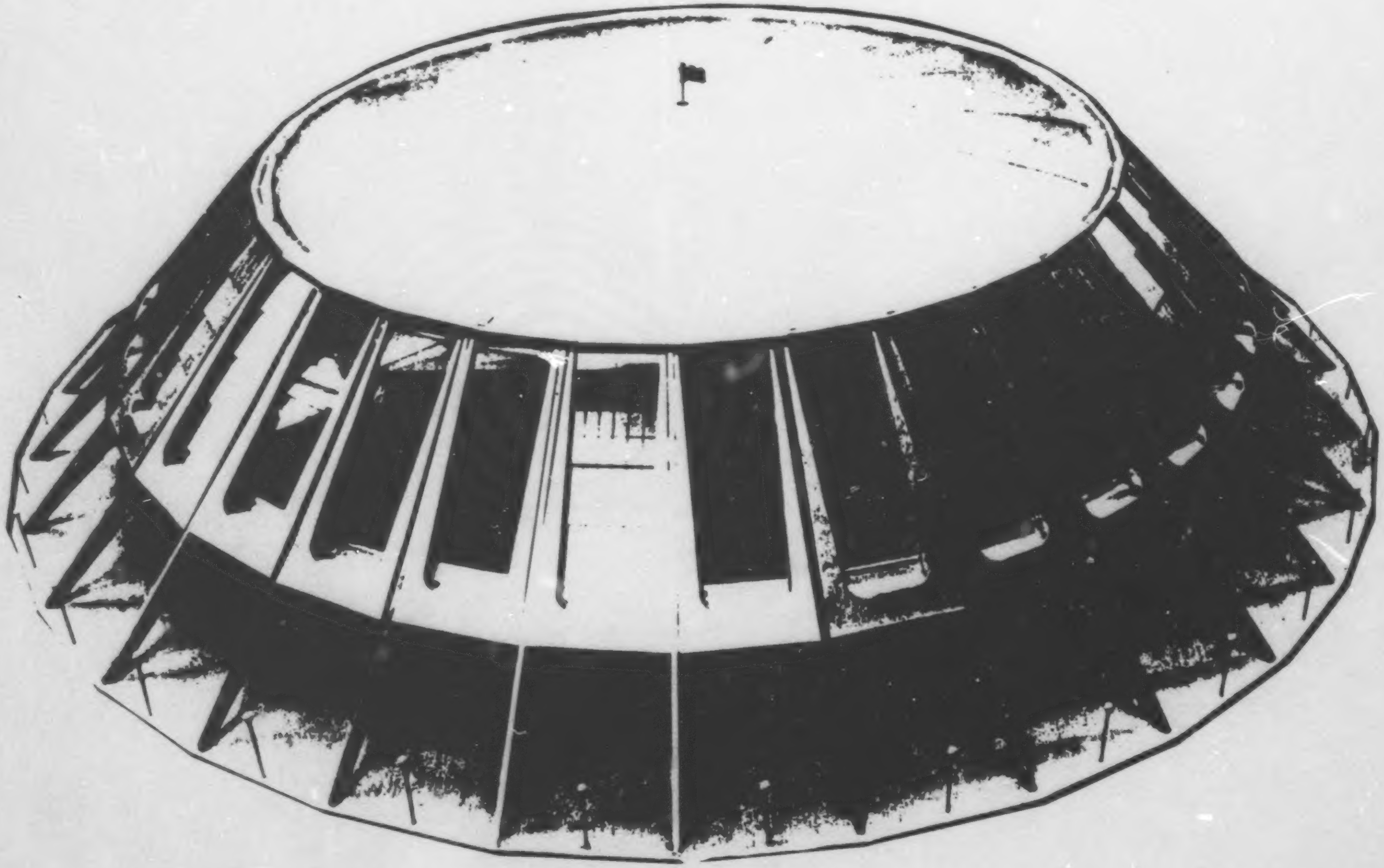
ROOF: Stainless steel inflated membrane pressurized at 15 lb./sq. in.

DIMENSIONS: STRUCTURE - 900' diameter base
200' total hieght above grade
'Opens' with transparent or translucent retractable side panels

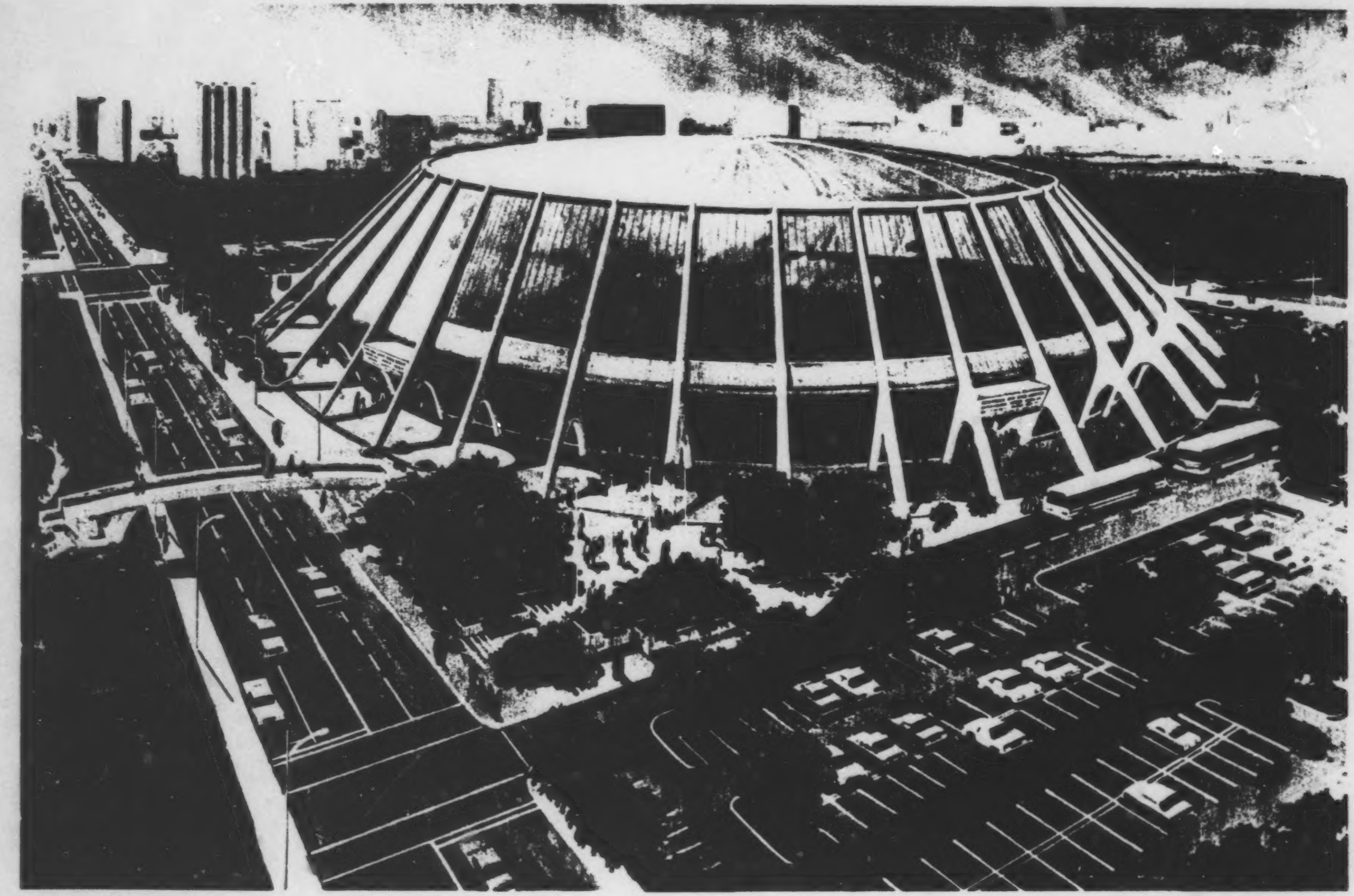
ROOF - 550' diameter compression ring
200' clear height from field level

EXAMPLE OF OTHER SIMILAR STRUCTURES: Physical education building at Dalhousie University in Halifax, Nova Scotia

NOTE: The concepts, analyses and designs included within this report remain the property of the above proponent. The reproduction of their material in this document is solely for information purposes and is not an endorsement of any aspect of the proposal.



ULTRADOME CONSORTIUM

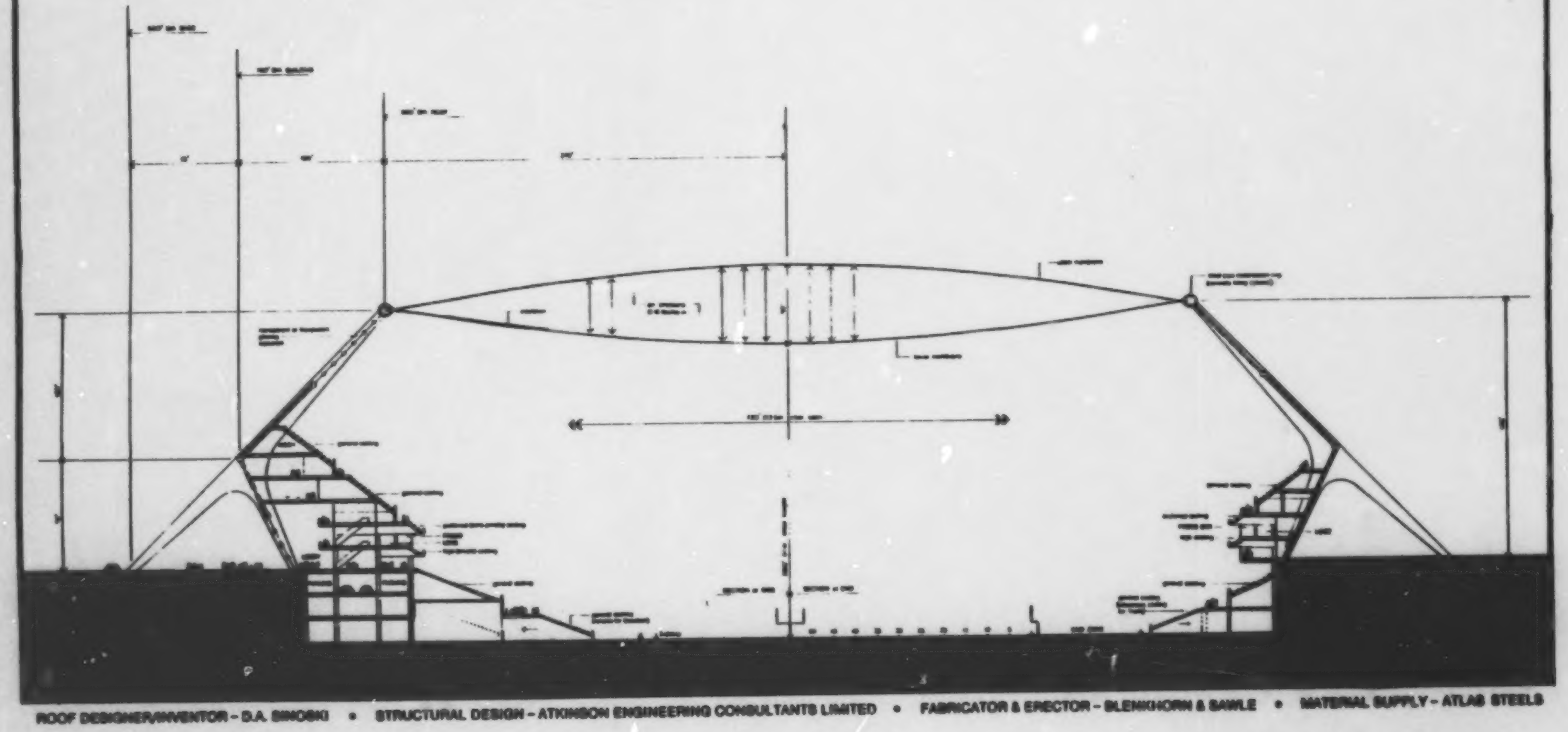


STAINLESS INFLATED ROOF FOR A COVERED (DOMED) STADIUM

ROOF DESIGNER INVENTOR - D A SINOSKI ● STRUCTURAL DESIGN - ATKINSON ENGINEERING CONSULTANTS LIMITED ● FABRICATOR & ERECTOR - BLENKHORN & SAWLE ● MATERIAL SUPPLY - ATLAS STEELS

ULTRADOME CONSORTIUM

A CANADIAN DEVELOPED IDEA - STAINLESS INFLATED ROOF



ROOF DESIGNER/INVENTOR - D.A. SINOSKI • STRUCTURAL DESIGN - ATKINSON ENGINEERING CONSULTANTS LIMITED • FABRICATOR & ERECTOR - BLENKHORN & SAWLE • MATERIAL SUPPLY - ATLAS STEELS

ULTRADOME CONSORTIUM

STADIUM STUDY COMMITTEE REPORT

APPENDIX VI

DESCRIPTION OF INDIVIDUAL FINANCIAL PROPOSALS

STADIUM STUDY COMMITTEE REPORT

APPENDIX VI

DESCRIPTION OF INDIVIDUAL FINANCIAL PROPOSALS

Part i FINANCING STUDY CONDUCTED BY MCLEOD YOUNG WEIR

Part ii EXCERPTS FROM SELECTED FINANCING PROPOSALS

STADIUM STUDY COMMITTEE
REPORT

APPENDIX VI Part i

TORONTO DOME STADIUM

Financing Study

McLeod Young Weir Limited

December 5, 1983

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APPENDIX

1. Dome Stadium Survey: Financings and Operating Results, McLeod Young Weir Limited, October 4, 1983

1.0 SUMMARY AND RECOMMENDATIONS

1.1 Financing

Based on McLeod Young Weir Limited's "Dome Stadium Survey" which is included as Appendix 1 to this memorandum, we have concluded that there are no conventional methods by which more than a small portion of the costs of construction of a dome stadium may be privately financed. Stadium operating profits are insufficient to provide a reasonable return to a private investor on such a large investment.

The following table summarizes the most recent publicly available figures for revenues, operating expenses and operating profits (before interest charges and depreciation) of the dome stadiums which we have reviewed:

	Seatle Kingdome	Pontiac Silverdome	New Orleans Superdome	Minneapolis Metrodome
		(U.S. dollars	in thousands)	
Fiscal year (1)	Dec. 31/82	June 30/82	June 30/82	Dec. 31/82
Revenues	$7,128	$7,445	$ 8,334	$ 5,786
Operating expenses ...	5,478	5,672	12,665	4,410
Operating profit	$1,650	$1,773	$(4,330)	$1,376

(1) The NFL players strike took place in 1982. The Houston Astrodome is operated by a private company. B.C. Place and the Indiana Convention Exhibition Centre do not segment stadium operations in publicly available financial information.

Except for the New Orleans Superdome, which has unusually high operating costs, the stadiums listed above generate annual operating profit (before debt service charges and depreciation) in the range of U.S.$1.4 - 1.8 million. Because approximately the same mix of events would be conducted in a Toronto dome stadium as has been conducted in other similar facilities, we would assume that the level of profits generated by these facilities would be representative of the magnitude of income available for debt service or to provide a return on equity for a Toronto dome stadium.

Assuming construction costs amounted to approximately $150 million, the operating profit required to debt finance the entire project would have to aggregate approximately $20 to $21 million in order to cover annual interest charges (based on an interest rate of 14%). In all likelihood, potential purchasers of a debt instrument would require projected operating profits to be at least 1.5 to 2 times interest charges prior to making a commitment to purchase such an instrument. Given the magnitude of stadium operating profits, no significant amount of construction costs could be financed with conventional debt raised through the private sector.

Similarly, financing the stadium using equity provides little or no return to the equity investor and would not be economically viable. A potential investor's return on investment would amount to approximately 1% annually, well below the expected return that would be required in order for a private investor to make an equity investment in such a facility.

Based on our analysis, we have concluded that primarily public sector funding in conjunction with any desired private sector participation is required in order to finance the costs of the construction of a Toronto dome stadium. The simplest and most effective method of government support for the financing of a dome stadium is the granting of funds for the stadium's construction.

1.2 Ownership and Management

The following comments with regard to ownership and management were made to us in our study of other dome stadiums.

Generally, stadiums are owned and controlled by one government or quasi-government body. Usually a separate stadium authority or commission governs the stadium and a staff manages its operations.

Some stadiums have chosen to contract out the operation of a part or all of its business activities to private companies that are specialists in these respective activities. For example, the New Orleans Superdome recently chose to contract out overall management to a private company in order to increase operating efficiencies and to reduce annual operating losses. Remunerated on an incentive fee basis, this private management company earned a fee of U.S. $1.9 million in 1982.

Although each stadium has taken a different approach to the management and control of its operations, comments made to us suggest that the ideal approach towards management and control would involve overall responsibility of all revenue producing activities and operations to one government owner. This government body could then subcontract to private services certain day-to-day operations on a fee for service basis with profits accruing to the stadium.

1.3 Generation of Operating Revenues and Capital Maintenance

Professional football and baseball revenues, together, generally accounted for the majority of rental revenues in the dome stadiums studied. Based on our review, professional football earns a stadium the most revenue per event and, depending upon the team's performance, can be the single largest rental revenue source. Baseball has approximately eight times the number of games per season as football, but produces annual rentals similar to football revenues. Other events generate revenues significantly smaller. In 1982, the Pontiac Silverdome generated U.S.$1.6 million in rental revenues from 10 football games while it received only U.S.$873,000 in rental revenue from approximately 75 other event days (excluding professional basketball).

The importance of "other events" revenues is dependent on the number of available "event days" in a year that are filled by such events and generally not dependent on the type of event. The number of such days would obviously be greater with a dome stadium than with an open stadium.

Of particular concern, none of the stadiums studied make an allowance for depreciation although most spend a few hundred thousand dollars annually on minor repairs and maintenance. Operating profits are generally too small to contribute to capital reserves for expensive capital replacements. Such capital replacements are financed by either a capital reserve fund (for example, the Seattle Kingdome) or an issue of new debt. For example, the Houston Astrodome recently raised U.S. $50 million in new debt financing in order to refurbish the U.S. $32 million stadium built in 1961.

Appendix 1 contains further comments on stadium operating results.

2.0 GOVERNMENT FINANCING

2.1 Grants

The simplest and most effective method of government support for the financing of a dome stadium is the granting of funds for the stadium's construction. The economics of a dome stadium dictate that government support must be the largest source of construction financing and the amount needed will likely require municipal, provincial and federal government participation. The contribution by each level of government would be a matter of negotiation among the senior political representatives of the three levels. However, if one level of government is to operate the stadium, their entitlement to the stadium's operating profits, however small, should be considered in such negotiations.

Government support could also take the form of a gift or exchange of government lands. The usefullness of this alternative depends on the stadium site chosen. An example involving a land exchange is B.C. Place.

It is assumed that the stadium will not pay any municipal or income taxes except for certain aspects of its operation that may be turned over to the private sector. Other taxes that may be foregone include sales taxes on building materials needed to construct the stadium. Foregone taxes are usually not as effective and less understood than outright grants and therefore may be undesirable. However, in calculating the net cost of a government grant program, consideration should be given to incremental tax revenues from forms of taxation not foregone.

2.2 Lottery

Lottery proceeds are potentially a very large source of government funds for the construction of a dome stadium. The major lotteries in Ontario are operated by the efficiently run Ontario Lottery Corporation which falls under the responsibilities of the Ontario Minister of Tourism and Recreation. Lottery profits are added to the Consolidated Revenue Fund of the Government of Ontario for disbursement by several government ministries. In 1982, such profits totalled $157.5 million. Lottery grants generally are available to non-profit organizations for projects in the fields of sports, fitness, recreation, heritage, libraries, arts and citizenship.

There are many proposals for the use of existing lottery profits and if a significant contribution of lottery proceeds is to be made to a dome stadium, the Ontario Lottery Corporation will need to generate additional lottery profits. The Ontario Lottery Corporation estimates that its annual profits could be increased $30 million with the introduction of the newly planned "scratch-and-win" ticket. This estimate does not assume the use of a "dome dollar" game or its special redemption feature which the Ontario Lottery Corporation believes is not a requirement for the new ticket's success. However, the "dome dollar" theme could be used as a feature in one of the 13 week cycles of the Ontario Lottery Corporation's new game. During this cycle, corporate sponsors, without official endorsement by the lottery, could assist ticket sales somewhat by offering to redeem the tickets on purchases of their products or services. A major portion of the costs of a dome stadium could be met if the incremental profits from the new "scratch-and-win" ticket were allocated to the stadium during its three year construction period.

2.3 Development of Surrounding Lands

Although extensive government support would be required to establish a dome stadium, some of the government funds may be recovered through the development of lands surrounding the stadium. By purchasing more land than is needed for the stadium itself, the governments involved could participate in any profitable development of those lands as hotels, offices, restaurants and retail stores are built to accommodate the large number of people and activities associated with the stadium. Funds would be generated by selling or leasing the lands. The amount of funds recovered would depend heavily on the stadium site selected and the number of acres of land available adjacent to it. Sites that could be developed profitably even without a stadium would be the most desirable.

Based on our survey of other dome stadiums, we have come to the conclusion that the construction of a sporting facility does not, in itself, guarantee that surrounding lands will be developed to the extent that the stadium can be financed through such development. Stadiums such as the Pontiac Silverdome and the Seattle Kingdome are cases in point. The exception to this, is B.C. Place which financed the construction of a dome stadium, the cost of which is expected to be recovered through the government-initiated development of the 224 acre False Creek area of Vancouver in which the stadium is located.

In the United States, a very common approach to service debt charges is to tax the revenues of businesses most likely to benefit from the existence of a stadium. A tax as a small percentage of the room rate charged in local hotels and motels and/or a surcharge on food and beverages, including alcohol, sold in local hotels and restaurants is most common. Such revenues represent, in most cases, the largest sources of funds for debt service on the U.S. stadiums' debt. Use of this approach in Toronto would have to be studied in relation to the potential effects such price increases would have on the local tourist industry.

3.0 PRIVATE SECTOR PARTICIPATION

3.1 Sale of Future Revenues

The most practical forms of private sector contribution to the construction costs of a dome stadium involve the sale of future rights to all or part of certain revenues. For example, it is common for a private concessionaire to install all concession facilities in exchange for the right to operate them for a set period. The Superdome's concession facilities are privately built and operated under a 15 year contract after which the stadium will own the facilities. A similar opportunity exists with the stadium's multi-million dollar electronic scoreboard. Private interests would build the scoreboard to obtain the rights to sell the advertising that would be displayed on it. The Metrodome took this approach. Parking facilities could also be turned over to the private sector to operate in exchange for a capital contribution.

3.2 Corporate Sponsors

Corporate donations could be expected to finance a small portion of the stadium's construction costs. For example, the City of Minneapolis Businessmen's Association contributed U.S.$1 million toward the construction of the Metrodome. However, corporations would rent most of the estimated 100 private boxes that should be constructed in a dome stadium. Unfurnished, these boxes rent for U.S. $5,000 to $20,000 annually in dome stadiums in the United States. Event tickets are purchased in addition to these rentals and reserve parking is sometimes included. As part of the initial financing of a new dome stadium, corporate sponsors could be asked for several years' rental payments in advance or sold exclusive rights to boxes for a set period.

3.3 Capital Cost Allowance

An indirect form of government contribution involves the deduction of initial operating losses and capital cost allowance from the otherwise taxable income of private investors who finance the cost of construction of the stadium. Such investors would receive tax deferral benefits and a share of the operating cash flow. However, given the small projected cash flows from the stadium and the allowable annual deduction arising from this class of asset, an adequate investment return would only be achieved on a relatively small part of the total financing required to construct the stadium. A practical way for the private sector to obtain some capital cost allowance deductions would involve the stadium acquiring certain capital equipment on a lease-purchase basis. The leasing company would purchase the equipment, lease it to the stadium and use the capital cost allowance until the stadium exercised its purchase option. Only capital equipment with commercial value could be financed this way without government guarantees. The limited amount of such equipment in a stadium therefore limits the amount of financing that could be raised by this method. The lease-purchase method was used by Seattle for its concession facilities, scoreboard and energy systems.

4.0 ANALYSIS OF SPECIFIC FINANCING PROPOSALS

4.1 Exhibition Place

Sources of dome stadium construction financing

($ millions)	
100	"Dome dollar" lottery net profits over three years. During construction, corporate sponsors would provide up to $50 million in the form of a letter of credit to be repaid from lottery proceeds.
5	Some private boxes to be sold "for life" to corporate sponsors.
7	Scoreboard to be purchased by a corporate sponsor in exchange for a permanent ad on the scoreboard.
?	Concession operator's capital contribution.
25	Metropolitan Toronto grants.
balance	Federal government grants.

The dome dollar game would be operated by the Ontario Lottery Corporation. The details of the $50 million letter of credit to be provided by Dominion Stores and several other corporate sponsors are not yet finalized, but the Metro Chairman believes that the letter will be in the form of an interest-free loan with recourse only to the "dome dollar" lottery profits.

4.2 Trillium Dome

Source of dome stadium construction financing

$150 million	Public issue of 10%, 22 year debentures guaranteed by the Province of Ontario.

Currently, an instrument as described above would be issued with a 12.25% coupon rate not the 10% rate as proposed. The difference would result in increased annual interest costs of $3.4 million in initial years. Total interest costs based on a 12.25% coupon rate would amount to $237 million over the debenture's 22 year life.

Debt Service

Debt service is to be provided from stadium operating profits and the profitable development of 2,000 acres of land surrounding the stadium proposed to be purchased at $30,000 per acre using, in part, a $50 million interest-free loan from the Province of Ontario. Subsequent developed land sale values are assumed to be $90,000 to $300,000 per acre for residential, industrial and commercial use. The viability of this proposal is dependent on distant future land values which we are unable to assess. Commentary on stadium revenue, expenses and operating profits follows.

Rental Revenues: Assumes an uncommon flat $1 surcharge per event ticket rather than a percentage of the ticket price. As a result, baseball is shown to generate four times the revenue produced from football; experience of other stadiums shows that annual rentals from each of these two sports should be of similar magnitude.

Revenues in General: In every category, revenues are projected to be double the average amounts achieved by the four U.S. dome stadiums we reviewed.

Private Box Revenue: Assumes boxes are furnished and event tickets are included. No provision is made for teams to receive their substantial share of this ticket revenue. The $4 million private box revenue estimate compares with U.S. $840,000 earned by the Silverdome's 102 private boxes (excluding event tickets).

Operating Expenses: Total operating expenses in 1987 are projected to be approximately one-third less than the norm (indexed to 1987 dollars) experienced by the U.S. stadiums reviewed.

Operating Profit: In 1987, $8.7 million of operating profit before debt service is projected, primarily as a result of optimistic revenues discussed above.

4.3 Other Submissions

The Ontario Jockey Club, Crang and Boake and other submissions to the Stadium Study Committee did not contain specific or detailed financing proposals. These submissions contained primarily financing ideas which have been reviewed and included in discussions in other sections of this report.

DOME STADIUM SURVEY

Financings and Operating Results

McLeod Young Weir Limited

October 4, 1983

DOMED STADIUM SURVEY

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Executive Summary 1
Publicly Available Operating Results 3

Tab #

Survey Results
    Seattle Kingdome 1
    Pontiac Silverdome 2
    New Orleans Superdome 3
    Minneapolis Metrodome 4
    Indianapolis Hoosier Dome 5
    Houston Astrodome 6
    B.C. Place 7

EXECUTIVE SUMMARY

This report presents the results of a telephone survey conducted by McLeod Young Weir Limited of the North American domed stadiums. The purpose of the survey was to learn how each of the stadiums was financed, how their debt is serviced and how operating income is earned and used. Audited financial statements were obtained where available.

Financings

Major sources of funds:

i) Revenue bonds with 4% to 7% interest rates issued by a stadium authority, municipality, county or state that are payable from and secured by a pledge of proceeds of various excise taxes or stadium operating profits;

ii) General obligation bonds issued by the local government.

Other sources of funds:

i) Investment income on bond proceeds during construction;

ii) In many cases private groups constructed concession facilities, the scoreboard, the turf or energy and communications systems which were then leased back to the stadium, usually on an installment purchase basis;

iii) U.S. federal government grant (Seattle);

iv) Pro-sports teams constructed their own offices, ticket stalls and locker rooms (Minneapolis);

v) Private donations from business (Minneapolis) and foundations (Indianapolis);

Debt Service

Major funding sources:

i) Hotel/motel occupancy tax (2% to 10% of room rate);

ii) Food and beverage (including alcohol) tax;

iii) Real estate tax.

Other funding sources:

i) Stadium operating profit;

ii) Admission tax on professional sporting events (sometimes collected for other than stadium debt service);

iii) State lease rental payments;

iv) State tax on racetrack revenues;

v) Cigarette tax.

General

i) All the dome stadiums are located within a few miles of the downtown area with half the number situated right downtown;

ii) Stadiums are managed by a:

  a) division of the local government,
  b) separate stadium authority or commission,
  c) private management firm reporting to a government body,
  d) private management firm;

iii) Dome construction includes concrete, steel and plexi-glass and air-supported fibreglas coated teflon.

Operating Results

i) All generate less than $2 million operating profit, except the New Orleans Superdome which had a $4.3 million operating loss;

ii) Stadium rentals are not always the major revenue source; concessions (Seattle) and parking (New Orleans) are also major sources;

iii) Virtually all stadiums have a professional football team and most have a baseball team. Professional basketball and soccer are less important sources of revenue;

iv) Conventions and exhibitions are the next most important sources of rental revenues;

v) In addition to rentals, stadiums all require the users to reimburse the stadium for utilities, ticket selling, clean-up and other disbursements related to users events;

vi) Private boxes provide a lucrative source of income ($5,000 to $20,000 each per annum);

vii) Domed stadiums are tourist attractions providing revenue from guided tours;

viii) Poor acoustics limit concert revenue;

ix) Year-round air-conditioning or heating is usually largest expense item after salaries and wages;

DOMED STADIUM SURVEY

Publicly Available
Operating Results (1)

($Thousands)

	Seattle Kingdome	Pontiac Silverdome	New Orleans Superdome	Minneapolis Metrodome
Fiscal Year (2):	Dec. 31/82	June 30/82	June 30/82	Dec. 31/82
Operating Revenues:				
Rentals	$1,863	$2,950	$1,948	$2,445 (3)
Concessions	1,905	1,607	1,107	1,989
Reimbursements/ Lessee services	1,448	924	1,514	563
Parking	1,192	1,124	2,110	95
Advertising	637	-	292	-
Tours	21	-	477	-
Private boxes	-	840	704	440
Other	62	-	182	254
	7,128	7,445	8,334	5,786
Operating Expenses:				
Management fee	-	-	1,903	-
Salaries/Wages	3,889	1,399	5,407	893
Utilities	349	1,260	2,924	1,200
Insurance	-	357	518	114
Repairs/Maintenance	186	380	1,059	129
Payments to tenants	-	-	-	987 (4)
Advertising	-	105	64	-
Professional fees	247		304	188
Contractual services	807	1,909	-	589
Other		262	486	310
	5,478	5,672	12,665	4,410
Operating income	$1,650	$1,773	$(4,330)	$1,376

Notes:

(1) The Houston Astrodome is operated by a private company. B.C. Place and the Indiana Covention Exhibition Centre do not segement stadium operations in publicly available financial information.
(2) The NFL players strike took place in 1982.
(3) Including $1.4 millon from 10% admission tax on ticket prices.
(4) Represents payments of concession revenue to Twins, Vikings and Gophers.

SEATTLE KINGDOME

Financing

Sources

$ millions	
$40.0	King County Unlimited Tax General Obligation Bonds issued between 1968 and 1973 with 40-year terms in series with interest rates ranging from 4.75% to 5.75%.

	$ Millions
1968 Issue @ 4.75% for 40 years	$ 5.0
1969 Issue @ 5.75% for 40 years	5.0
1972 Issue @ 5.50% for 40 years	30.0
	$40.0

13.6	Proceeds of a lawsuit against a contractor (interim financing provided by banks).
7.4	Investment income from bond issue proceeds.
7.0	Private groups constructed: concession facilities (15 yrs. @ 6.5%); scoreboard (15 yrs. @ 7 3/4%); energy systems (25 yrs. @ 6%); and then leased them back to the stadium on an instalment purchase basis. This arrangement developed when the stadium ran out of construction funds.
1.0	U.S. federal government grant.
$69.0	

Debt Service

1982	Interest	$2,000,000
	Principal	505,000 (1)
		2,505,000

(1) Increases by $30,000/year.

Operating profit from the stadium is not available to pay debt service but is put into an enterprise fund for future capital improvements.

Debt service is funded by:

(i) 2% tax on all hotel/motel charges in King County (started in 1968);

(ii) if (i) is insufficient, King County can levy a real estate tax assessment on King County residents (started in 1973 and discontinued in 1981);

(iii) if (i) and (ii) are insufficient, stadium's enterprise fund is used and then King County's general credit.

SEATTLE KINGDOME

Fact Sheet

A. General

Contact: May Liu, Chief Financial Officer, Seattle Kingdome (206) 628-3400.

Construction started in November, 1972.

Opened in March, 1976.

64,000 seats.

Dome is made of concrete.

Director of the Kingdome reports to the King County executive (elected) which answers to the King County Council (elected).

The Kingdome is a division of King County not a separate incorporated entity.

Kingdome is situated within 3 miles of downtown Seattle and next to AMTRAK railway station.

4 professional sports teams:

basketball (Supersonics);
football (Seahawks);
soccer (Sounders);
baseball (Mariners).

B. Operating Results Comments

Major revenue source is concessions:

Stadium owns the concession facilities and contracts operation to an independent consessionaire;

Kingdome receives 42% of gross sales or approximately $2.5 million in 1982;

Kingdome pays to Seattle Mariners a portion of concessions (1982 - $600,000).

Key to success is number of event days booked (1982 - 212 event days despite football strike). 95% of bookable days are booked.

Best year was 1979.

Total revenue (rentals, concessions and parking) by team in 1982:

	$ Million	
Football	$1.0	6 games
Baseball	1.5	62 games
Basketball	1.5	17-19 games
Soccer	.4	43 games
	$4.4	

Parking - 2,200 spaces, all revenue to Kingdome. Received $105,000 in parking revenue from City as well.

Kingdome owns scoreboard and has entered into 10-year lease agreement with the sponsors.

No private boxes.

Capital improvements - $300,000/year has been accumulated. Almost no expenditures were made until 1983 when the Kingdome will spend $2.0 million:
$1.3 million - new turf
$ .7 million - roof recoating.

No real property tax or federal income tax paid by the Kingdome (no state income tax in Washington).

Kingdome pays 8% sales tax on parking and 1.5% tax on all fees (rentals, concessions and advertising).

5% admissions tax on each ticket is paid to the City of Seattle.

Concerts - very infrequent because of poor acoustics.

Consumer/trade shows - every year Kingdome has boat, automobile and home shows.

1983 Kingdome budget:

	$Thousands
Revenues	$7,775
Expenses	6,083
Operating Profit	$1,692

PONTIAC SILVERDOME

Financing

Sources

$ millions	
$25.0	Pontiac Stadium Revenue Bonds issued in June, 1973 for 30 years at interest rates ranging from 6.4% to 7.0% secured by way of first lien against the operating profit from the stadium. (City of Pontiac has paid any cash shortfall, primarily 1973 and 1974 prior to stadium opening, between debt service and operating profit to a total of $11 million to date).
15.95	Pontiac Stadium General Obligation Bonds issued in June, 1973 on the City of Pontiac credit. Interest rates ranged from 4% to 6%. Term to maturity was 30 years.
7.1	Roof purchase instalment bonds issued in October, 1975 at interest rates ranging from 7 1/2% to 9%. Stadium is responsible for bond debt service.

Purchasers were:

	$ Millions
City of Pontiac Police & Fire Retirement System	$2.0
City of Pontiac General City Retirement System	2.0
2 local banks	3.0
	$7.0

5.0	Interest earned on bond issue proceeds during construction.
$53.05	

Debt Service

Pontiac Stadium Revenue Bonds are funded out of stadium operating profit:

(1983) Principal	$ 500,000
Interest	1,500,000
	2,000,000
Less: Operating Profit	1,586,000
Cash Shortfall	412,000
Michigan State Grant	550,000 (1)
Surplus	$ 138,000

(1) Was $800,000/year, but has been declining recently. Michigan pays its grant out of increased tax levied by Michigan on racetrack revenues.

Pontiac Stadium General Obligation Bonds debt service is paid by the City of Pontiac which funds this obligation through a real property tax assessment in the City of Pontiac.

Debt service on the roof purchase instalment bonds is paid by the stadium out of cash surplus, if any, and with assistance from the City of Pontiac.

PONTIAC SILVERDOME

Fact Sheet

A. General

Opened August, 1975.

City of Pontiac has only 80,000 residents and is currently experiencing 30% unemployment.

Capacity - 80,500 seats.

Professional sports teams:

Basketball	- Detroit Pistons (NBA)
Football	- NFL Detroit Lions
	- USFL Michigan Panthers
Soccer	- Detroit Express.

Silverdome is not air-conditioned.

Air-supported fibreglas coated teflon roof.

Executive Director of the Silverdome reports to the Stadium Building Authority which reports to the Mayor and City Council of the City of Pontiac. Stadium Building Authority is comprised of:

1 representative of Oakland County;
Executor Director of the Stadium;
1 representative of State of Michigan; and
6 representatives of City of Pontiac.

Acoustics - poor.

B. Operating Results Comments

Rental revenues generated by 18% tax added to price of each ticket (maximum $1.50 and minimum $0.25).

of $2,950,000 rental revenue sources are:

Detroit Lions	$1,605,000
Detroit Pistons	472,000
All other events	873,000
	$2,950,000

Detroit Lions - in addition to 18% tax, Lions pay 7% of balance of ticket price after 18% tax.

Lions (10 games) Fiscal 1982:

Rent	$1,605,000
Concessions	763,000
Parking (1)	483,000
	2,851,000

(1) Gross before deduction of $90,000 payment to parking contractor.

Pistons pay greater of 18% tax or $11,500/game (always paid base rent to date).

Other stadium events include:

- rock concerts
- trade shows
- high school sports
- tractor pulls
- closed circuit T.V. fights
- college basketball games
- NCAA indoor track meet
- rodeo
- religious convention.

Total event days - 125 to 130.

Concessions - owned by stadium and contracted to independent concessionaire who pays stadium 22% of gross receipts.

Parking Cars 10,500

Buses 400

Stadium owns but contracts out

Stadium receives gross receipts and pays contractor a monthly fee plus expenses

For Detroit Lion games, parking is pre-sold with season tickets so that the stadium gets football parking revenue at beginning of season.

Scoreboard advertising revenue goes to private contractor who built and paid for the scoreboard and operates it on a 10-year lease.

Capital improvements to date have been absorbed by the City of Pontiac.

New turf system costing $1.6 million has been financed on a 7-year instalment purchase basis.

Private boxes - 102 - charge $8,500 to $15,000 each (does not include cost of tickets which must be bought separately for each event).

No federal, state or local taxes payable by stadium.

NEW ORLEANS SUPERDOME

Financing

Sources

$millions	
	Revenue bonds:
$ 16.5	1st series 1970
113.0	2nd series 1971
8.25	3rd series 1974
25.25	Interest income during construction
$163.0	

In 1976, the $131,565,000 principal outstanding was refunded through a defeasance program setup using the proceeds of the following issue (subsequently, all three initial series were redeemed).

Issue:	$134,000,000, 25 year revenue bonds
Issuer:	Louisiana Stadium and Exposition District, a political subdivision of the State with powers to incur bond indebtedness, authorize the issuance of refunding bonds, lease its land and facilities to the State and levy a hotel and motel tax in two parishes in metropolitan New Orleans.
Security:	Payable from and secured by a pledge of proceeds of a 4% hotel/motel tax and lease rentals derived from a lease agreement with the State.
Interest Rates:	Rising from 4% in 1980 to 6% in 2001.
Principal Repayment:	Payments began in 1980 at $4.3 million and increase annually to $7.1 million in 2000.

Debt Service

$11.8 million in 1982 funded as follows:

	$ Millions
4% hotel/motel tax	$ 9.1
Interest earned on tax	1.4
State lease rental payment	1.3
	$11.8

Hotel/motel tax revenues in excess of debt service requirements (expected to occur by 1985) will be used to cover stadium operating losses. Profits (if any) will go to the State.

4% hotel/motel tax revenue increased from $1.5 million in 1975 to $9.1 million in 1982; hotel rooms increased from 7,000 to 25,000 rooms.

NEW ORLEANS SUPERDOME

Fact Sheet

A. General

Stadium and land is owned by the Louisiana Stadium and Exposition District and is leased to the State for lease rentals sufficient to cover debt-service shortfalls in each year. The State also finances operating losses of the stadium.

Contact: Robert Rummel
V.P., Finance & Administration
(504) 587-3663

Opened in August 1975.

Located in downtown New Orleans.

72,000 seat stadium; average event attendance of 25,000.

Land, building and equipment were all purchased outright.

District is governed by a Board of Commissioners appointed by the Governor of the State.

B. Operating Results Comments

NFL football team (Saints) pays 10% of the gate after admission tax.

Relies on football (NFL, university and high school) for almost half of event rental revenues.

Concerts, conventions, college tournaments and basketball are major events other than football.

Has no baseball.

64 box suites; 5 year term - $13-$20 thousand per year plus tickets.

Tours: 250,000 persons per year ($477,000 in 1982).

248 event days per year.

600 equivalent event days per year in adjoining large meeting rooms.

Air-conditioned year round at a cost of $2.3 million (three-fourths of utilities budget).

Fully carpeted and upholstered seats require expensive repair and maintenance.

2,500 - 3,000 cars per day non-event parking; parking is the largest revenue item at $2.1 million; 5,500 parking spaces.

Concession facilities were built (for $7.5 million) and are owned by Ogden Food Service under a 15 year exclusive contract whereby the stadium gets, on average, 32% of sales. After the 15 years, the stadium will own the facilities.

Scoreboard, turf and communications system (total cost $6.0 million) provided under lease purchase plans.

Lessee services (staff and utilities) are charged out at cost plus a 40% mark-up.

Downtown location requires 15 man, 24 hour security service.

13% State admission tax on all ticket sales.

Since July 1977, the stadium has been managed by a private firm paid on a pure incentive basis:

Improvement over 1977 Deficit	Fee as % of Deficit
First $1.0 million	30%
Next $1.75 million	40%
Above $2.75 million	25%

In 1982, the manager earned a fee of $1.9 million, without any capital invested.

MINNEAPOLIS METRODOME

Financing

Sources

$ millions	
$55.0	Metropolitan Council of Minneapolis 30-year 7.5% bond issue privately placed with 5 local banks (this represented favourable financing at the time since market rates for such a bond issue approximated 9%).
4.7	Minnesota Vikings contribution to construction costs for their offices, ticket stalls and locker rooms.
0.7	Minnesota Twins contribution to construction costs relating to baseball specific facilities (the Metropolitan Council was attempting to secure the commitment of the Twins to play in the stadium and consequently the Twins contribution to construction costs was less than the Vikings).
1.0	City of Minneapolis Businessmen's Association contribution to assist in getting the Twins to play in the stadium.
12.9	Interest earned on the $55 bond issue proceeds during construction.
$74.3	

Debt Service

Interest and principal (1982)	$5,000,000
Less: Operating income available for debt service	1,418,000
Debt service shortfall	$3,582,000

Debt service shortfall is funded by:

i) Interest earned (1): $392,000 (1982)

ii) A 3% tax on all hotel/motel charges and liquor sold in Minneapolis is imposed by the Metropolitan Council ($3,200,000 in fiscal 1982).

Interest income arises because bond payments must be deposited in trust 6 months before payment date.

MINNEAPOLIS METRODOME

Fact Sheet

A. General

Contact - Roger Simonson - V.P. Finance, Metropolitan Sports Facilities Commission (612) 332-0386. Executive Director is Jerry Bell.

Owned and operated by Metropolitan Sports Facilities Commission.

Situated in downtown Minneapolis.

Air-conditioning to be installed in 1983.

Metropolitan Council of Minneapolis, a political subdivision of the State, governs several commisions.

Approximately 100 event days:

Baseball (Twins)	81
NFL Football (Vikings)	10
University Football (Gophers)	6
	97

Conscious decision was made by Minneapolis to exclude federal and state levels of government in financing the stadium.

Opened April 1, 1982.

B. Operating Results Comments

Stadium charges 10% admission tax on all tickets (no minimum price) which has discouraged rock concerts, amateur sports and other events.

6% State sales tax on all tickets.

Rentals

Minnesota Twins - Stadium gets 7 1/2% of gross ticket price after admission and sales taxes.

Minnesota Vikings - Stadium gets 9% of gross ticket price after admission and sales taxes.

University of Minnesota Gophers - No rent, pay admissions tax only.

Private boxes - 115.

Parking Minimal revenue since no on-site parking except for buses.

City of Minneapolis contributes portion of downtown revenue to stadium (1982 - $105,000).

Concessions
- owned by stadium
- operation contracted out to independent concessionaire
- operator receives 5% of net profit
- balance of profits go to stadium
- stadium pays on account of concessions
  - Twins - 30% of gross receipts
  - Vikings - 10% of gross receipts
  - Gophers - 35% of gross receipts

Scoreboard was built by private contractor who retains right to advertising revenue.

The stadium pays no realty tax.

Stadium is non-taxable - federal, state or local.

1983 budget and 1984 projected operating results:

	1983 Budget ($thousands)	1984 ($thousands)
Revenue	7,457	7,736
Expenses	4,540	4,722
Operating profit	2,917	3,014
Capital improvement reserve	417	433
Available for debt service	$2,500	$2,581

INDIANAPOLIS HOOSIER DOME

Financing

Sources

$millions	
$ 47.1	Marion County Capital Improvement Board Excise Taxes Revenue Bonds issued May 1, 1982 in three series:

Issue	Price	Rate	Due	$Millions
Serial Bonds	10.0	9 1/2-12%	1988-97	5.8
Term Bonds	99.75	12 1/4%	2002	6.4
Term Bonds	99.5	12 1/2%	2012	35.0

30.0	Grants from two foundations:

	$millions
Lilly Endowment, Inc.	$25.0
Krannert Charitable Trust	5.0
	30.0

3.8	Excess proceeds of excise taxes not required for the existing convention centre.
8.2	Investment income from bond issue proceeds.
$89.1	

Uses

$76.2	Project costs (including expansion of existing exhibition centre.)
2.9	Capitalized interest
7.3	To operating and bond reserve accounts
2.7	Expenses of issue and other
$89.1	

Projected Debt Service

1983 $5,807,000 interest

Debt service is funded by:

(i) 5% County Hotel Occupancy Tax

(ii) 1% County Food and Beverage Tax (including alcoholic beverages)

(iii) 5% County Admissions Tax on professional sporting events

(iv) $350,000 annually from state of Indiana Cigarette Tax Fund

The 1982 bonds are funded out of the same sources on a parity with the County's outstanding $13,450,000 Convention Exhibition Center (General Obligation) Bonds.

The 1982 bonds are limited obligations of the County and do not constitute a charge against either the County's or the State's general credit.

INDIANAPOLIS HOOSIER DOME

Fact Sheet

A. General

Contact: Allan Armstrong, Project Manager
(317) 632-3100

63,000 seats.

The Capital Improvement Board of Managers of Marion County was created by the State to act on behalf of Marion County to construct, control and operate the capital project. The existing Convention Exhibition Center will be responsible for the stadium's operation and management.

Convention Exhibition Center was started in 1969.

Stadium is to be completed by July, 1984.

B. Operating Results Comments

Financial projections do not separate the new stadium and the existing Convention Exhibition Center.

HOUSTON ASTRODOME

Financing

The construction of the $32 million Houston Astrodome was financed by a $32 million issue of 4% Harris County Revenue Bonds with a 40-year term to maturity. The bond issue was completed in 1961. The bonds are secured against the revenues generated by the Astrodome which, as a result of the lease discussed below, is equal to the bond debt service.

The Houston Sports Association Inc. ("HSA Inc."), a private company, has leased the Astrodome from Harris County pursuant to a 40-year lease and 2 10-year renewal options. The lease payments have been calculated to equate to the debt service on the $32 million bond issue. HSA Inc. operates the Astrodome and, after lease payments, is entitled to the operating profits or responsible for operating losses of the Astrodome.

The lease between Harris County and HSA Inc. is secured by the Astrodome. Debt service is deposited in trust one year in advance of payment.

The only cost to Harris County taxpayers is the Harris County debt capacity utilized in issuing the revenue bonds. Conversely, there is no direct return to Harris County from the Astrodome.

In 1982, Harris County issued $50 million of 9.17% 30 year Revenue Bonds secured against the revenues to be generated by an increase in the Harris County hotel/motel tax from 6% to 10%. The proceeds of this bond issue were used to refurbish the Astrodome and to make changes to the physical structure which the County felt were necessary. These changes included a new $4 million colour scoreboard, expanded arena space for conventions and many minor repairs.

The lease between HSA Inc. and Harris County was renegotiated and the annual lease payments were increased by $225,000.

HOUSTON ASTRODOME

Fact Sheet

A. General

Contact: Gene Stoffel, Chief Financial Officer, HSA Inc., (713) 799-9500.

Bond issue completed in 1961.

Construction completed in 1965.

Air-conditioned.

Roof - steel structure and plexi-glass.

Capacity baseball (Astros) - 45,000
football (Oilers) - 47,000.

Unique example of a publicly funded facility leased to private sector operator.

5 miles from downtown Houston.

15,000 parking spaces.

B. Operating Results - Commments

HSA Inc., being a private company, does not make its operating results publicly available.

HSA Inc. experienced cash flow shortfalls relative to debt service in about 1972 and was supported by Ford Motor Credit and G.E. Credit on an interim basis.

B.C. PLACE

Financing

B.C. Place is a 224-acre waterfront development in downtown Vancouver. One aspect of the B.C. Place development is the domed stadium.

The B.C. Municipal Building Corporation, a provincial crown corporation, has injected $205 million into B.C. Place, a corporation, and is the sole shareholder. Although it is difficult to track funds, it is estimated that $126.0 million of this equity contribution was used to construct the domed stadium. B.C. Municipal Building Corporation has funded its equity injection with public debt borrowings of approximately $105 million to date. The Minister of Finance of British Columbia retains the voting rights to B.C. Place common shares owned by the B.C. Municipal Building Corporation.

All deficits of B.C. Place are funded by borrowings which are guaranteed by the Province of British Columbia.

B.C. PLACE

Fact Sheet

A. General

Contact - Baine Boyes (604) 687-3800.

The Board of Directors of B.C. Place, who are appointed by the B.C. Municipal Building Corporation, is comprised of the Minister Responsible for B.C. Place and 9 private enterprise members from the community.

B. Operating Budget Comments

Fiscal year end is March 31.

Opened June 19, 1983.

Budget is confidential but evidently indicates positive operating profit of $700,000 (before depreciation and amortization) for the nine-months ended March 31, 1984.

Budget includes following event days:

	Event days	%
Football (B.C. Lions)	11	9
Soccer (Whitecaps)	18	15
Trade and consumer shows	75	63
Entertainment	15	13
	119	100

Baseball is included in the budget commencing in 1986.

Revenue budget approximate break-out is:

Rentals	3,000,000
Concessions	800,000
Advertising	800,000
Private boxes (1)	1,200,000
	$5,800,000

(1) Only 1/3 available in year 1 - eventual total is 101.

3,000 surface parking spaces - not included in stadium costs, therefore parking revenue not included in stadium revenue account.

Concessions - B.C. Place operates concessions and receives all operating profits.

Scoreboard - owned by stadium and advertising leased by the stadium.

Conscious decision was made to have the stadium manage all aspects of the stadium operation.

Capital improvement reserve is budgeted at $1,000,000 which approximates straight-line accounting depreciation.

Line [illegible] parking spaces - not included in station costs. Therefore parking revenue not included in station revenue account.

Concessions - i.e. Plaza Ventures (concessions) are included all operating profits.

Maintenance - based on existing and contractually between the station

Contract services was made to have the station manage all aspects of the station operation.

Capital improvement reserve is budgeted at $1,000,000 which approximates operating loss at existing volume levels.

STADIUM STUDY COMMITTEE REPORT

APPENDIX VI Part ii

EXCERPTS FROM SELECTED FINANCING PROPOSALS

Capital Canada

Exhibition Place and Dome Dollar Game

Trillium Dome Corporation

STADIUM STUDY COMMITTEE REPORT

APPENDIX VI Part ii

EXTRACT FROM CAPITAL CANADA LIMITED PROPOSAL

Contact: R.J. Foster
President
Capital Canada Limited
P.O. Box 315
Commerce Court Postal Station
Toronto, Ontario
M5L 1G1
(416) 947-1400

TORONTO DOMED STADIUM

A Partnership Financing Proposal
Involving the Public and Private Sectors

January 10, 1984

3.0 THE PROPOSAL

3.1 General

Capital Canada's proposal contemplates the involvement and co-operation of the private and public sectors in a financing option which:

(a) involves the private sector in substantial financial support through a direct investment toward the total cost of the domed stadium; and,

(b) minimizes government funding costs and obligations.

3.2 Scope

This proposal considers the ownership and operation of a domed stadium facility only. It excludes ancillary services such as parking or a trade show complex.

3.3 The Partnership

The stadium would be constructed and operated by a partnership involving private and public interests.

Capital inputs would depend upon final construction price but it is proposed that the private investors' commitment be one-third of the total. If the stadium were to cost $150 million the private capital required would therefore be $50 million.

.../6

It is anticipated that the partnership would proceed with construction under a fixed price arrangement with a contractor. In the event that construction is arranged on a basis other than fixed price, the private investors total contribution would be agreed upon and fixed in advance.

Construction costs would be met by private capital and public funding on a simultaneous basis.

3.4 Private Investors

It is anticipated that the private investors would be major Canadian public companies with significant interests in Metropolitan Toronto. A minimum investment of five million dollars would be required from each participant.

3.5 Management

The stadium would be managed by a Board with proportional representation from the private investors and government funding sources.

Day-to-day operations would be carried out by staff hired for that purpose or by contracting the management responsibility.

The facility would be operated as a commercial enterprise and therefore usage charges to tenants would reflect market conditions and costs of operation.

.../7

3.6 Tax Considerations

The partnership would be structured such that the income or losses arising from the operation of the stadium would be allocated to the private investors based upon their pro rata share of the private investors' equity. Such income or losses would be added or deducted from income from other sources in calculating each private investors' taxable income for the period.

3.7 Sharing of Project Cash Flows

Private investors and the public sector would share in the stadium's cash flows (after the costs of operating, repairing and maintaining the stadium) in the same proportion as their respective investments in the project.

3.8 Operating Cash Flow Deficiencies

Utilizing normal financial structuring for a partnership of this type, Capital Canada recommends that in order to ease the administrative burden of potential (but unlikely) negative fluctuations in cash flow, government(s) would advance funds to cover periodic operating cash flow deficiencies under a Cash Flow Deficiency Agreement ("CFDA"). Such funds so advanced would be repaid with interest from future positive cash flows. Four years after the stadium completion date, and every three years thereafter, private investors would be required to fund their approximate one-third portion of any amount remaining outstanding under the CFDA.

.../8

Failure to respond to such a call for funds would result in a punitive dilution of a private investor's equity interest in the partnership. The dilution factor is determined by multiplying by two the quotient obtained when the amount of the cash call is divided by the private investor's original investment.

3.9 Option to Buy

Commencing seven years from the stadium completion date, the public sector would have an option to buy the private investors' equity interest in the stadium. The minimum option price would be equal to the original cost of the private sector investment. The option price may include an added amount to reflect the equity interest of the private sector, and in any event to be not less than 2.5% compounded for each year following the seventh year of the investment.

3.10 Transfer of Partnership Investment

Private investors would have the right to sell their partnership investment subject to a two stage approval process. A proposed sale would have to first be approved by the private investors as a group. If a proposed sale had first stage approval, then it would have to be ratified by the board as a whole. Approvals could not be unreasonably withheld.

3.11 Additional Entitlements

In addition to their equity interest, private investors would be entitled to additional benefits as summarized below.

(a) One V.I.P. box for 20 years.

(b) Six V.I.P. parking spaces for 20 years.

(c) Recognition of a private investor's name on a plaque in a prominent place in the stadium or similar appropriate recognition.

(d) First right of refusal for advertising in the stadium for a 20 year period. The nature and extent of this right would have to be determined on a case-by-case basis. Brand names and products would have to be defined. The needs of the two major tenants, should they elect to participate, would have to be accommodated. In any event, the advertiser would pay market rates for advertising privileges.

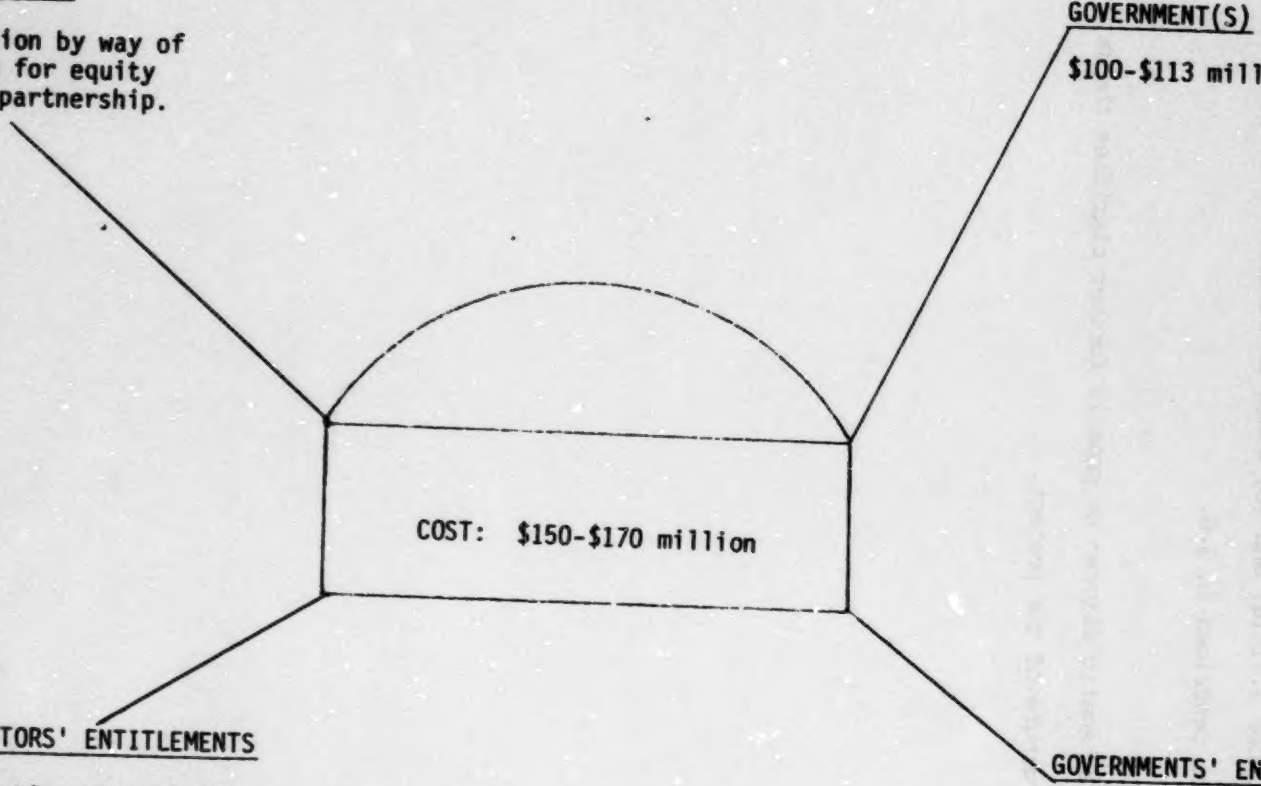
(e) Private investors would receive the right to use for ten years the stadium name and logo on products and in advertising and promotional material.

The entitlements noted above shall remain in effect for the terms noted in the event the "option to buy" is exercised (Refer to Section 3.9).

In the event private investors fail to respond to cash calls as described in 3.8, then rights under 3.11 (d) and (e) would be forfeited. Entitlements under 3.11 (a) and (b) would be reduced in accordance with the dilution factor described in 3.8.

The schematic diagram on page 12 further clarifies the proposed financial structure of the project.

SCHEMATIC OF PROJECT FINANCIAL STRUCTURE



PRIVATE INVESTORS

$50-$57 million by way of subscription for equity interest in partnership.

GOVERNMENT(S)

$100-$113 million

COST: $150-$170 million

PRIVATE INVESTORS' ENTITLEMENTS

- pro rata portion of cash flow
- allocation of income or losses for tax purposes
- V.I.P. box, parking, advertising rights.
- Proportionate Board representation.

GOVERNMENTS' ENTITLEMENTS

- pro rata portion of cash flow
- option to buy
- proportionate Board representation.

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STADIUM STUDY COMMITTEE REPORT

APPENDIX VI Part ii

EXTRACT FROM EXHIBITION PLACE PROPOSAL

Contact: George A. Cohon
Chairman
The Board of Governors of Exhibition Place
Exhibition Place
Toronto, Ontario
M6K 3C3
(416) 593-7551

PRESENTATION TO
THE STADIUM STUDY COMMITTEE
REGARDING
A DOMED STADIUM AT EXHIBITION PLACE

SUBMITTED BY: THE BOARD OF GOVERNORS
OF EXHIBITION PLACE
MR. GEORGE COHON, CHAIRMAN

DATE: SEPTEMBER 28, 1983

3. FINANCING

FINANCING

- THE PROPOSED STADIUM WILL REQUIRE INVESTMENT OF $140 MILLION, IN 1983 CONSTANT DOLLARS.

- PHASING OF THE EXPENDITURES WILL BE AS FOLLOWS, ASSUMING EARLY APPROVAL.

	1983 CONSTANT $ $ MILLION
1984	49.0
1985	53.2
1986	37.8
TOTAL CAPITAL COST	$140.0

FINANCING

MAJOR COMPONENTS

- THE THREE KEY COMPONENTS OF THE FINANCING PLAN ARE:

  1) A "DOME DOLLAR" GAME
  2) PRIVATE CAPITAL CONTRIBUTIONS
  3) GOVERNMENT GRANTS

- THESE COMPONENTS COULD BE ARRANGED IN VARYING PROPORTIONS TO GENERATE THE REQUIRED $140 MILLION.

- THE LARGEST COMPONENT WILL BE THE "DOMED DOLLAR" GAME. A UNIQUE CONCEPT HAS BEEN DEVELOPED SPECIFICALLY FOR EXHIBITION PLACE, INCLUDING THE FOLLOWING ELEMENTS:

  - CALLED THE "DOME DOLLAR GAME"
  - EVERY PARTICIPANT HAS:

    - THE GUARANTEE OF AN INSTANT WIN OF SMALL PRIZES (E.G. SOFT DRINK, BASEBALL TICKETS)
    - A CHANCE OF WINNING MAJOR CASH PRIZES

FINANCING
MAJOR COMPONENTS

(CONT'D)

- THE MOST UNIQUE FEATURE IS THE FACE VALUE OF THE DOME DOLLAR TICKET CAN BE REDEEMED (LIKE A COUPON) AGAINST THE PURCHASE OF PARTICIPATING SPONSORS' PRODUCTS.

- MAJOR SPONSORS HAVE BEEN ACTIVE IN SPONSORSHIP AT THE CNE AND CONSIDER THE SPONSORSHIP OF THE EXHIBITION STADIUM SITE AN EXTENSION OF THIS INVOLVEMENT.

- GAME SPONSORS ARE EXPECTED TO PUT UP IRREVOCABLE LETTERS OF CREDIT FOR $50 MILLION TO BE APPLIED TO CONSTRUCTION COSTS. THIS CREDIT WILL BE PAID DOWN OVER TIME BY PROCEEDS FROM THE GAME.

- THE GAME WHICH WILL GENERATE $100 MILLION, NET OF EXPENSES, WILL BE CONTROLLED AND OPERATED BY ONTARIO LOTTERY CORPORATION, WHO WILL RETAIN THE CONCEPT FOR OTHER USES WHEN THE GAME HAS REPAID THE LETTERS OF CREDIT.

FINANCING (CONT'D)

- PRIVATE CAPITAL CONTRIBUTIONS WOULD BE OBTAINED FOR VARIOUS STADIUM COMPONENTS, SUCH AS:
    - PRIVATE BOX LEASES
    - SCOREBOARD
    - CONCESSIONAIRES
- CAPITAL GRANTS WOULD BE SOUGHT FROM METROPOLITAN TORONTO, ONTARIO GOVERNMENT AND GOVERNMENT OF CANADA.
- EACH JURISDICTION HAS A VESTED INTEREST IN THE EXHIBITION PLACE SITE AND WOULD ACHIEVE INVESTMENT SYNERGY FROM THE SITE:
    - THE FEDERAL GOVERNMENT - BY COMPLIMENTING HARBOURFRONT AND INTERNATIONAL TRADE/TOURISM THRUST.
    - THE ONTARIO GOVERNMENT - BY ENHANCING INVESTMENTS IN ONTARIO PLACE, EXHIBITION PLACE, THE ICTS DEVELOPMENT, AND TRADE DEVELOPMENT
    - THE METRO TORONTO GOVERNMENT - BY ENHANCING THE CENTRAL WATERFRONT DEVELOPMENT PLANS AND REQUIRED TRANSPORTATION INFRASTRUCTURE, AS WELL AS IMPACTING DOWNTOWN RETAIL AND RECREATION SERVICES AND ENHANCING THE WATERFRONT PARK DEVELOPMENT.

THE DOME DOLLAR GAME

	TRADITIONAL LOTTERY	DOME DOLLAR GAME
PRIZE STRUCTURE	40 %	52% (BECAUSE OF REDEMPTION FACTOR)*
CHANCES OF WINNING	5.68%	100%
ADMINISTRATION	15 %	15%
NET	45 %	33%

*DOES NOT INCLUDE SMALL INSTANT-WIN PRIZES, SUCH AS FREE BLUE JAYS TICKETS, LARGE BOTTLES OF COKE, LARGE BAGS OF POTATO CHIPS, ETC.

REVENUE

CONSERVATIVE ESTIMATE OF FIRST THREE YEARS' SALES
(BASED ON EXPERIENCE IN SIMILAR JURISDICTIONS)

$300,000,000

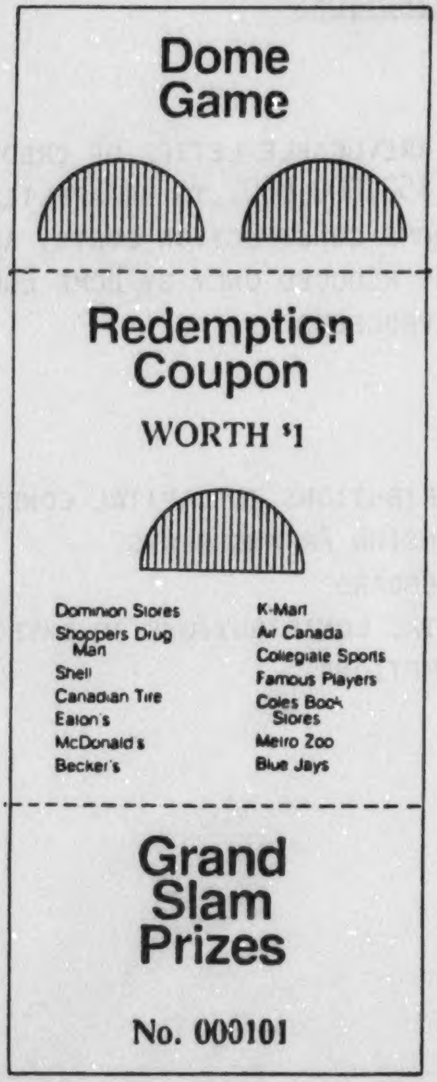
NET AT 33%:

$100,000,000

PRIVATE SECTOR CONTRIBUTIONS

Dominion Stores Limited:	An irrevocable letter of credit for $50,000,000, to be applied to dome construction costs, and to be reduced only by Dome Dollar net proceeds
Patrons:	Contributions to capital construction Licensing Arrangements Scoreboard Capital contributions to skyboxes Redemptions

THE DOME DOLLAR GAME



Dome Game

Redemption Coupon

WORTH $1

Dominion Stores	K-Mart
Shoppers Drug Mart	Air Canada
Shell	Collegiate Sports
Canadian Tire	Famous Players
Eaton's	Coles Book Stores
McDonald's	Metro Zoo
Becker's	Blue Jays

Grand Slam Prizes

No. 000101

INSTANT WIN

WORTH AT LEAST $1 IN SIGNIFICANT MERCHANDISE OR REDEMPTIONS

GRAND SLAM

EXAMPLES OF REDEMPTION FEATURE

EACH TICKET, WHETHER A MAJOR PRIZE WINNER OR NOT, CAN BE REDEEMED FOR:

ONE DOLLAR OFF EACH $25 TO $40 WORTH OF MERCHANDISE AT DOMINION

ONE DOLLAR OFF EVERY GASOLINE SALE OF AT LEAST $10 AT SHELL

ONE DOME DOLLAR WORTH ONE EGG MCMUFFIN AT MCDONALD'S (RETAIL VALUE $1.25)

SAVE TWENTY DOME DOLLARS AND GET $20 OFF ANY DESTINATION THAT CP AIR FLIES TO.

ONE DOLLAR WORTH $1 ON ANY $15 PURCHASE AT SEARS

STRUCTURE

1. Total control by Ontario Lottery Corporation
    - Distribution
    - Security
    - Administration

2. Payment to Dome of first $100 million net revenue

3. Province of Ontario then retains instant-win concept, already proven, accepted and successful

STADIUM STUDY COMMITTEE REPORT

APPENDIX VI Part ii

EXTRACT FROM TRILLIUM DOME CORPORATION PROPOSAL

Contact: Harold G. Shipp
President
Trillium Dome Corporation
Mississauga Executive Centre
Suite 100
Two Robert Speck Parkway
Mississauga, Ontario
L4Z 1H8
(416) 275-2750

TRILLIUM DOME CORPORATION - FINANCE COMMITTEE REPORT

This report describes the assumptions and steps to be taken in order to accomplish the financing and building of a Dome Stadium in the Province of Ontario by the private sector.

1 PROPERTY OWNERS

It is proposed that property owners of approximately 2,000 acres of land in the designated area sell their land to a new corporation, Trillium Dome Corporation ("TDC") at $30,000 per acre. The terms of sale would be $15,000 per acre in cash and the balance secured by a five year, nine percent mortgage with interest deferred for the first two years but accrued and payable through years three to five. Provisions would be made for partial discharges as the land is absorbed into use.

2 TRILLIUM DOME CORPORATION

TDC borrows $50,000,000 from the Province of Ontario for servicing costs and the down payment on the land and issues non interest bearing Debentures "B". The terms would include the following:

a. principal repayable in years six to ten;

b. security would be in the form of a first mortgage on the land.

TDC borrows $150,000,000 for construction of the Trillium Dome and issues Debentures "A". The terms would include the following:

a. interest at 10%;

b. principal repayments in equal amounts of $8,000,000 for years four through twenty-one and the balance of $6,000,000 in the twenty-second year;

c. first mortgage on the Trillium Dome and land;

d. guaranteed by the Province of Ontario.

3 **CITY OF MISSISSAUGA**

The City would purchase 100 acres adjacent to the 200 acres required for the Trillium Dome at $125,000 per acre for its own use.

4 **PROVINCE OF ONTARIO**

The Province would pay for roads which are essential to the project but are not part of the internal road system (i.e. additional cloverleafs and arterial roads) at an estimated cost of $25,000,000.

The Province guarantees Debentures "A" issued by TDC in the amount of $150,000,000.

The Province subscribes to Debentures "B" for $50,000,000, the terms of which are set out in paragraph 2 secured by a mortgage on the 2,000 acres of land.

Governments at all levels would benefit from the immense tax base created by such a corporation. The corporation would repay the Province of Ontario the principal portion of the interest free loan (Debenture "B") and repay the principal and interest of the $150,000,000 debenture "A". Capital tax, retail sales tax, federal and provincial income taxes, property taxes and other indirect taxes would be generated totally by the private sector.

The Finance Committee has prepared a detailed set of projections relating to the Trillium Dome Corporation. These forecasts cover the operation of a dome stadium and the development of adjacent lands. It has been assumed that construction of the dome stadium would begin in 1984 with completion to allow for occupation by the Toronto Blue Jays for the full 1987 baseball season.

The following projections are included in the attached appendices:

Appendix A	Trillium Dome Corporation Dome Division Operating Revenue and Expense Projections 1987 - 2001
Appendix B	Trillium Dome Corporation Dome Stadium Assumptions and Comments - Cash Flow Projections
Appendix C	Trillium Dome Corporation Land Division Pro-Forma Cash Flow 1986 - 2001
Appendix D	Trillium Dome Corporation Land Development Cash Flow Assumptions
Appendix E	Trillium Dome Corporation Combined Pro-Forma Cash Flow Projections 1986 - 2001
Appendix F	Trillium Dome Corporation Combined Pro-Forma Statements of Income and Retained Earnings Projections 1986 - 2001
Appendix G	Trillium Dome Corporation Supplementary Schedule Projections 1986 -2001 Schedule of Mortgages Receivable
Appendix H	Trillium Dome Corporation Supplementary Schedule Projections 1986 -2001 Schedule of Income Taxes
Appendix I	Trillium Dome Corporation Combined Pro-Forma Balance Sheet Projections 1986 - 2001

The projected data reflect a set of assumptions which the Finance Committee consider realistic and achievable in the circumstances. However, it is important to recognize that these assumptions relate to future events and by their nature are susceptible to variation. A number of alternative financial scenarios have been considered by the Finance Committee which could also be used as a basis for further discussion.

TRILLIUM DOME CORPORATION - FINANCE COMMITTEE REPORT

The Finance Committee confirms that the projections contained herein have been properly compiled based on the assumptions summarized in the attached documentation.

TRILLIUM DOME CORPORATION FINANCE COMMITTEE

GARY F. COLTER C.A.	Peat, Marwick, Mitchell & Co.
KEVIN J. TREACY C.A.	Peat, Marwick, Mitchell & Co.
STUART H. B. SMITH C.A.	Shipp Corporation Limited
JOHN T. HILBORN C.A.	Hilborn, Ellis, Grant
JOHN R. HILBORN C.A.	Hilborn, Ellis, Grant
MALCOLM CAREY	Wood, Gundy Limited
JOSEPH E. TODD JR.	
RON E. WINTER P. Eng.	R.E. Winter and Associates Limited
JAMES M. BEATTY Q.C.	

APPENDIX A

TRILLIUM DOME CORPORATION

DOME DIVISION OPERATING REVENUE AND EXPENSE PROJECTIONS
1987 - 2001

ARENA OPERATING REVENUES	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
BASEBALL (Note 2)															
Number of Uses	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Attendance	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000	1,950,000
Surcharge (Note 4)	$1.00	$1.00	$1.00	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.25	$1.50	$1.50	$1.50	$1.50	$1.50
Revenue	$1,950,000	$1,950,000	$1,950,000	$1,950,000	$1,950,000	$2,437,500	$2,437,500	$2,437,500	$2,437,500	$2,437,500	$2,925,000	$2,925,000	$2,925,000	$2,925,000	$2,925,000
FOOTBALL (Note 2)															
Number of Uses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Attendance	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Surcharge	$1.00	$1.00	$1.00	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.25	$1.50	$1.50	$1.50	$1.50	$1.50
Revenue	$500,000	$500,000	$500,000	$500,000	$500,000	$625,000	$625,000	$625,000	$625,000	$625,000	$750,000	$750,000	$750,000	$750,000	$750,000
SOCCER (Note 3)															
Number of Uses - Regular	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
- Exhibition	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Attendance	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Surcharge	$1.00	$1.00	$1.00	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.25	$1.50	$1.50	$1.50	$1.50	$1.50
Revenue	$250,000	$250,000	$250,000	$250,000	$250,000	$312,500	$312,500	$312,500	$312,500	$312,500	$375,000	$375,000	$375,000	$375,000	$375,000
CONCERTS															
Number of Uses	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Attendance	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000
Surcharge	$2.00	$2.00	$2.00	$2.00	$2.00	$2.50	$2.50	$2.50	$2.50	$2.50	$3.00	$3.00	$3.00	$3.00	$3.00
Revenue	$750,000	$750,000	$750,000	$750,000	$750,000	$937,500	$937,500	$937,500	$937,500	$937,500	$1,125,000	$1,125,000	$1,125,000	$1,125,000	$1,125,000
CIRCUS															
Number of Uses	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Attendance	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Surcharge	$1.00	$1.00	$1.00	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.25	$1.50	$1.50	$1.50	$1.50	$1.50
Revenue	$75,000	$75,000	$75,000	$75,000	$75,000	$93,750	$93,750	$93,750	$93,750	$93,750	$112,500	$112,500	$112,500	$112,500	$112,500
OTHER COMMERCIAL															
Number of Uses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Attendance	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Surcharge (Flat Rate)	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$25,000.00	$31,250.00	$31,250.00	$31,250.00	$31,250.00	$31,250.00	$37,500.00	$37,500.00	$37,500.00	$37,500.00	$37,500.00
Revenue	$250,000	$250,000	$250,000	$250,000	$250,000	$312,500	$312,500	$312,500	$312,500	$312,500	$375,000	$375,000	$375,000	$375,000	$375,000
Total Events	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123
Total Attendance	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000
TOTAL OPERATING REVENUE	$3,775,000	$3,775,000	$3,775,000	$3,775,000	$3,775,000	$4,718,750	$4,718,750	$4,718,750	$4,718,750	$4,718,750	$5,662,500	$5,662,500	$5,662,500	$5,662,500	$5,662,500

Notes:
1. No provision made for basketball franchise.
2. Excludes playoffs.
3. Excludes playoffs, international exhibition matches.
4. Surcharges increase by 25% of original charge in years 6 & 11.
5. Includes 3 international matches . Total expected attendance is 100,000.

APPENDIX A

TRILLIUM DOME CORPORATION

DOME DIVISION OPERATING REVENUE AND EXPENSE PROJECTIONS
1987 - 2001

ANNUAL DOME REVENUES															
Operating Revenues	$3,775,000	$3,775,000	$3,775,000	$3,775,000	$3,775,000	$4,718,750	$4,718,750	$4,718,750	$4,718,750	$4,718,750	$5,662,500	$5,662,500	$5,662,500	$5,662,500	$5,662,500
Private Box Revenue (100 @ 40000 yrs 1-5, 50000 yrs 6-10, 60000 yrs 11-15)	$4,000,000	$4,000,000	$4,000,000	$4,000,000	$4,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$6,000,000	$6,000,000	$6,000,000	$6,000,000	$6,000,000
Advertising Revenue	$1,250,000	$1,312,500	$1,378,125	$1,447,031	$1,519,383	$1,595,352	$1,675,120	$1,758,876	$1,846,819	$1,939,160	$2,036,118	$2,137,924	$2,244,820	$2,357,061	$2,474,914
Concession Revenue	$1,000,000	$1,050,000	$1,102,500	$1,157,625	$1,215,506	$1,276,282	$1,340,096	$1,407,100	$1,477,455	$1,551,328	$1,628,895	$1,710,339	$1,795,856	$1,885,649	$1,979,932
Parking Uses:															
Baseball	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300	637,300
Football	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200	136,200
Soccer	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100	48,100
Concerts	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000	102,000
Circus	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400
Other Commercial	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900	60,900
Total Parking Used	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900	1,004,900
Parking Fee (Flat Rate)	$4.00	$4.25	$4.50	$4.75	$5.00	$5.25	$5.50	$5.75	$6.00	$6.25	$6.50	$6.75	$7.00	$7.25	$7.50
Parking Revenues	$4,019,600	$4,270,825	$4,522,050	$4,773,275	$5,024,500	$5,275,725	$5,526,950	$5,778,175	$6,029,400	$6,280,625	$6,531,850	$6,783,075	$7,034,300	$7,285,525	$7,536,750
TOTAL ANNUAL REVENUE	$14,044,600	$14,408,325	$14,777,675	$15,152,931	$15,534,389	$17,866,109	$18,260,915	$18,662,901	$19,072,425	$19,489,863	$21,859,363	$22,293,839	$22,737,477	$23,190,736	$23,654,096

APPENDIX A

TRILLIUM DOME CORPORATION

DOME DIVISION OPERATING REVENUE AND EXPENSE PROJECTIONS
1987 - 2001

SPECIFIC VARIABLE COSTS PER EVENT	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Hostesses and Security Guards															
BASEBALL															
Number of uses	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78
Employee hours required	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$351,000	$368,550	$386,978	$406,326	$426,643	$447,975	$470,374	$493,892	$518,587	$544,516	$571,742	$600,329	$630,346	$661,863	$694,956
FOOTBALL															
Number of uses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Employee hours required	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$60,000	$63,000	$66,150	$69,458	$72,930	$76,577	$80,406	$84,426	$88,647	$93,080	$97,734	$102,620	$107,751	$113,139	$118,796
SOCCER															
Number of uses	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Employee hours required	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$51,000	$53,550	$56,228	$59,039	$61,991	$65,090	$68,345	$71,762	$75,350	$79,118	$83,074	$87,227	$91,589	$96,168	$100,977
CONCERTS															
Number of uses	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Employee hours required	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$67,500	$70,875	$74,419	$78,140	$82,047	$86,149	$90,456	$94,979	$99,728	$104,715	$109,950	$115,448	$121,220	$127,281	$133,645
CIRCUS															
Number of uses	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Employee hours required	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$15,000	$15,750	$16,538	$17,364	$18,233	$19,144	$20,101	$21,107	$22,162	$23,270	$24,433	$25,655	$26,938	$28,285	$29,699
OTHER COMMERCIAL															
Number of uses	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Employee hours required	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
Hourly wage	$5.00	$5.25	$5.51	$5.79	$6.08	$6.38	$6.70	$7.04	$7.39	$7.76	$8.14	$8.55	$8.98	$9.43	$9.90
Cost	$30,000	$31,500	$33,075	$34,729	$36,465	$38,288	$40,203	$42,213	$44,324	$46,540	$48,867	$51,310	$53,876	$56,569	$59,398
Total Events	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Total Specific Variable Costs	$574,500	$603,225	$633,386	$665,056	$698,308	$733,224	$769,885	$808,379	$848,798	$891,238	$935,800	$982,590	$1,031,719	$1,083,305	$1,137,471

APPENDIX A

TRILLIUM DOME CORPORATION

DOME DIVISION OPERATING REVENUE AND EXPENSE PROJECTIONS
1987 - 2001

ANNUAL EXPENDITURES	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Operating Expenses															
Fixed Stadium Costs:															
Overhead	$2,000,000	$2,100,000	$2,205,000	$2,315,250	$2,431,013	$2,552,563	$2,680,191	$2,814,201	$2,954,911	$3,102,656	$3,257,789	$3,420,679	$3,591,713	$3,771,298	$3,959,863
Repairs and Maintenance	$300,000	$315,000	$330,750	$347,288	$364,652	$382,884	$402,029	$422,130	$443,237	$465,398	$488,668	$513,102	$538,757	$565,695	$593,979
Utilities	$2,000,000	$2,100,000	$2,205,000	$2,315,250	$2,431,013	$2,552,563	$2,680,191	$2,814,201	$2,954,911	$3,102,656	$3,257,789	$3,420,679	$3,591,713	$3,771,298	$3,959,863
Annual Fixed Costs	$4,300,000	$4,515,000	$4,740,750	$4,977,788	$5,226,677	$5,488,011	$5,762,411	$6,050,532	$6,353,058	$6,670,711	$7,004,247	$7,354,459	$7,722,182	$8,108,291	$8,513,705
Variable Costs															
Specific costs	$574,500	$603,225	$633,386	$665,055	$698,308	$733,224	$769,885	$808,379	$848,798	$891,238	$935,800	$982,590	$1,031,719	$1,083,305	$1,137,471
Common costs (per event)															
Parking	$2,200	$2,310	$2,426	$2,547	$2,674	$2,808	$2,948	$3,096	$3,250	$3,413	$3,584	$3,763	$3,951	$4,149	$4,356
Cleaning	$1,600	$1,680	$1,764	$1,852	$1,945	$2,042	$2,144	$2,251	$2,364	$2,482	$2,606	$2,737	$2,873	$3,017	$3,168
Total Variable Costs	$3,800	$3,990	$4,190	$4,399	$4,619	$4,850	$5,092	$5,347	$5,614	$5,895	$6,190	$6,499	$6,824	$7,165	$7,524
Number of Events	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Annual Common Variable Cost	$513,000	$538,650	$565,583	$593,862	$623,555	$654,733	$687,469	$721,843	$757,935	$795,831	$835,623	$877,404	$921,274	$967,338	$1,015,705
Total Projected Operating Costs	$5,387,500	$5,656,875	$5,939,719	$6,236,705	$6,548,540	$6,875,967	$7,219,765	$7,580,754	$7,959,791	$8,357,781	$8,775,670	$9,214,453	$9,675,176	$10,158,935	$10,666,881
Financing Expense	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$14,200,000	$13,400,000	$12,600,000	$11,800,000	$11,000,000	$10,200,000	$9,400,000	$8,600,000	$7,800,000	$7,000,000	$6,200,000
TOTAL ANNUAL EXPENSES	$20,387,500	$20,656,875	$20,939,719	$21,236,705	$20,748,540	$20,275,967	$19,819,765	$19,380,754	$18,959,791	$18,557,781	$18,175,670	$17,814,453	$17,475,176	$17,158,935	$16,866,881
Total Annual Revenue	$16,044,600	$16,408,325	$16,777,673	$15,152,932	$15,534,389	$17,866,109	$18,268,915	$18,662,901	$19,072,425	$19,289,863	$21,859,363	$22,293,838	$22,737,477	$23,190,736	$23,654,096
Total Annual Expenses	$20,387,500	$20,656,875	$20,939,719	$21,236,705	$20,748,540	$20,275,967	$19,819,765	$19,380,754	$18,959,791	$18,557,781	$18,175,670	$17,814,453	$17,475,176	$17,158,935	$16,866,881
Net Revenue or Expense	($4,342,900)	($4,248,550)	($4,162,046)	($6,083,773)	($5,214,151)	($2,409,858)	($1,550,850)	($717,853)	$112,634	$732,083	$3,683,693	$4,479,385	$5,262,301	$6,031,801	$6,787,215
Annual Debt Retirement	$0	$0	$0	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000	$8,000,000
Indicated Positive or Negative Cash Flow	($4,342,900)	($4,248,550)	($4,162,046)	($14,083,773)	($13,214,151)	($10,409,858)	($9,550,850)	($8,717,853)	($7,887,366)	($7,267,917)	($4,316,307)	($3,520,615)	($2,737,699)	($1,968,199)	($1,212,785)
Proceeds Required From Mississauga Land Partnership To Meet Cash Flow Deficiency.	($4,342,900)	($4,248,550)	($4,162,046)	($14,083,773)	($13,214,151)	($10,409,858)	($9,550,850)	($8,717,853)	($7,887,366)	($7,267,917)	($4,316,307)	($3,520,615)	($2,737,699)	($1,968,199)	($1,212,785)

APPENDIX B

DOME STADIUM ASSUMPTIONS AND COMMENTS - CASH FLOW PROJECTIONS

ANNUAL OPERATING REVENUES

BASEBALL

- 78 event days including 3 doubleheaders;
- no provision for playoff or exhibition games;
- attendance 25,000 per event which approximates 1983 attendance for Blue Jays at CNE;
- surcharge of $1.00 represents lease revenue for TDC;
- Blue Jays will gross individual ticket price less $1.00 surcharge, 7% sales tax and 20% share for visiting teams.
- in addition Blue Jays will receive a portion of concession revenues, and broadcasting rights revenue (excluding pay TV rights which are to be negotiated and revenues, if any, shared with TDC).

FOOTBALL

- 10 event days including 2 exhibition and 8 league games;
- no provision for playoff games;
- attendance 50,000 which would represent an approximate increase of 15,000 per game over average attendance levels for the past 4 years;
- surcharge of $1.00 compares for example to $1.50 U.S. charged by Pontiac Silverdome to Detroit Lions on tickets which cost $12.50.

SOCCER

- 14 league games excluding exhibition or playoffs;
- attendance 150,000 which approximates current attendance;
- surcharge of $1.00 represents gross lease revenue for TDC;
- 3 international exhibitions, estimated attendance of 100,000, based on past popularity of international contests and large ethnic population in Metro Toronto.

APPENDIX B

CONCERTS

- 15 event days with major attractions;
- average crowd 25,000 which may be on conservative side (David Bowie concert recently drew 60,000 at CNE);
- $2.00 surcharge assumed in view of much higher price scale for concert tickets;
- fierce competition will exist with Kingswood, CNE and Maple Leaf Gardens.

CIRCUS

- a 5 day circus appearance has been assumed with an average attendance of 15,000;
- ticket surcharge $1.00 for TDC (it is difficult to justify operation of dome facility for any lesser rent).

OTHER COMMERCIAL

- it is assumed that there will be 10 miscellaneous revenue producing event days per annum including thrill shows, major exhibitions, political rallies, religious rallies and other;
- a flat rate lease arrangement for $25,000 per event is assumed for this category.

TOTAL EVENT DAYS

- 135 excluding non-revenue producing events which could be substantial.

No provision has been made for Pay TV revenues, basketball franchise, wrestling or boxing matches.

GENERAL

- surcharges are assumed to remain constant for first five years of operation of Dome with 25% increase for years 6 - 10 and additional 25% for years 11 - 15;
- it is critical that 15 year binding agreements be negotiated with Blue Jays, Argonauts and Blizzard or their successors in advance of beginning of construction of dome;
- all surcharges are subject to individual negotiation which will likely require a free exchange of financial information between TDC and respective teams.

APPENDIX B

PRIVATE BOX REVENUE

- projected at $40,000 for each of 100 boxes in years 1 - 5 based on five year lease with increments of 25% for years 6 - 10 and 11 - 15;
- Mr. H. Renaud, General Manager, B.C. Place, believes that $40,000 is reasonable assuming each box is at least partially decorated at cost of TDC (with maximum decorating budget for each suite) and each suite has 10 seats with no necessity to pay for tickets for each event;
- Mr. H. Ballard reportedly charges $26,000 at Maple Leaf Gardens for a 6 seat box;
- it is anticipated that there will be an excess demand for these boxes.

ADVERTISING REVENUE

- B.C. Place has $1,000,000 in committed revenue for advertising within the stadium;
- TDC projections assume a conservative 25% higher figure in year 1 in consideration of much greater market area and increased exposure relating to baseball franchise;
- advertising revenue has been increased in subsequent years on a 5% compounded basis.

CONCESSION REVENUE

- projected revenue is based on 10% of anticipated gross concession revenue which has been estimated utilizing average expenditures at specific events;
- it is anticipated that an additional 20% or some $2,000,000 profit will be available for allocation between concession operator and teams;
- in subsequent years revenue has been increased on a 5% compounded basis.

PARKING REVENUE

- McCormick Rankin Transportation Analysis indicates that 81.7% of people attending TDC events will travel by automobile with 2.5 patrons per car for baseball and 3 patrons per car for other events;
- the foregoing estimates have been applied to the estimated attendance figures for each type of event to determine the projected annual parking space usage;
- a parking fee of $4 in year 1 has been assumed which compares to a $3 rate currently in force at the CNE and $5 U.S. at the Pontiac Silverdome;
- the parking fee has been increased in subsequent years at $.25 per annum.

APPENDIX B

HOSTESS AND SECURITY GUARDS

- B.C. Place utilizes between 130 and 240 persons depending on the type of event and anticipated attendance;
- B.C. Place does not utilize off-duty policemen in view of much higher costs;
- Mr. H. Renaud of B.C. Place advised that a reduced number of people will be hired for these duties after early stages of opening B.C. dome;
- TDC projections assume that each employee will be required to work 6 hours at an average wage of $5 per hour and average manpower requirements per event as follows:

baseball	150
football	200
soccer	100
concerts	150
circus	100
other commercial	100

- hourly wage is escalated 5% compounded in subsequent years.

OPERATING EXPENSES

OVERHEAD

- B.C. Place Budget for personnel is $1,500,000 to cover engineering (19), marketing (3), operations (4 full-time, 2 part-time) and administration (4);
- TDC projection for overhead is $2,000,000 inclusive of materials and supplier and internal services;
- expense has been escalated at 5% compounded per annum in subsequent years.

REPAIRS AND MAINTENANCE

ACTUAL 1981	Kingdome	$ 31,000
	Superdome	995,000
	Silverdome	354,000

- a figure of $300,000 has been used in year 1 for TDC escalating by 5% compounded per annum.

APPENDIX B

UTILITIES

ACTUAL 1981	Kingdome	$ 290,000
	Superdome	2,134,000
	Silverdome	1,023,000
	Metrodome budget 1982	1,184,000
	B.C. Place budget 1983	1,000,000

- a figure of $2,000,000 has been projected which approximates $2,050,000 estimate of Currie, Coopers & Lybrand for CNE Dome;
- utilities expense has been escalated at 5% compounded per annum in subsequent years.

COMMON COSTS (per event)

- Parking - It is assumed that 100 parking personnel will be required, 80 for 4 hours at $5 per hour and 20 for 6 hours at $5 per hour (to assist with exiting from parking areas).

CLEANING

- B.C. Place utilizes 45 people for 4 hours to clean the stadium after each event;
- TDC projections assume 50 people for 4 hours at $8 per hour;
- cost escalates at 5% compounded per annum in subsequent years.

TOTAL PROJECTED OPERATING COSTS

Year 1 - Trillium Dome	$ 5,325,000
B.C. Place projected 1983	5,000,000
Kingdome 1981	4,823,000
Superdome 1981	11,337,000
Silverdome 1982	5,043,000
Metrodome projected 1982	3,333,000
CNE Dome 1987 as per Currie, Coopers & Lybrand	4,829,000

FINANCING EXPENSE

- 10% interest per annum on declining balance with $8,000,000 principal reduction per annum beginning in 1990.

APPENDIX C

TRILLIUM DOME CORPORATION

LAND DIVISION PRO-FORMA CASH FLOW 1986 - 2001

Years ending December 31, 1986 - 2001
($000's)

PRO-FORMA CASH FLOW - LAND DIVISION	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total
Receipts																	
Downpayment on sale of land	$ 5,000	3,812	5,702	6,579	5,754	5,821	4,976	1,733	3,779	2,828	5,114	1,950	2,049	850	3,229	-	
Repayment of mortgages receivable	-	14,178	24,968	26,961	34,786	34,929	32,804	30,567	18,991	15,632	18,706	22,470	20,011	11,360	8,271	20,670	
	5,000	17,990	30,670	33,540	40,540	40,750	37,780	32,300	22,770	18,460	23,820	24,420	22,060	12,210	11,500	20,670	
Interest on mortgages receivable	-	2,552	3,219	3,883	4,808	4,612	4,437	4,018	2,150	2,371	2,400	3,324	2,296	1,545	962	1,860	
Total receipts	5,000	20,542	33,889	37,423	45,348	45,362	42,217	36,318	24,920	20,831	26,220	27,744	24,356	13,755	12,462	22,530	
Disbursements																	
Real estate fees	1,010	762	1,143	1,313	1,148	1,161	992	340	752	573	1,015	394	416	176	641	-	
Servicing	1,353	1,392	5,740	6,821	8,260	3,455	4,728	4,212	3,235	1,772	6,326	1,066	2,629	1,308	4,122	-	
Highways	12,303	6,613	749	-	2,408	1,161	-	-	1,351	-	-	-	-	-	-	-	
City fees	416	230	165	204	252	103	217	166	120	54	132	39	83	64	137	-	
Residential levies	-	345	635	616	200	-	124	-	-	-	-	-	-	-	-	-	
LC's and insurance	253	196	165	147	224	132	109	113	120	107	96	79	62	65	23	49	
Administration	1,150	1,210	1,270	1,340	1,400	1,470	1,550	1,620	1,710	1,790	1,880	1,970	2,070	2,180	2,290	4,900	
Discharge of mortgages payable	2,530	2,070	3,210	3,390	16,308	-	-	-	-	-	-	-	-	-	-	-	
Interest on mortgages payable	-	-	6,370	1,790	1,480	-	-	-	-	-	-	-	-	-	-	-	
Property taxes	1,050	1,030	953	871	756	647	527	437	342	286	263	150	165	65	92	-	
Total disbursements	20,273	13,846	20,400	16,489	32,508	8,129	8,247	6,868	7,730	4,582	7,708	3,684	5,403	3,836	7,305	4,949	
Net cash flow for year - land division	$ (15,273)	6,696	13,489	20,934	12,840	37,233	33,970	29,450	17,190	16,249	18,512	24,060	18,953	9,919	5,157	17,581	
Cumulative cash flow - land division	$ (15,273)	(8,577)	4,912	25,846	38,686	75,919	109,889	139,339	156,529	172,778	191,290	215,350	234,303	244,222	249,379	266,960	
PRO-FORMA SCHEDULE OF SALES - LAND DIVISION																	
Sales																	
Commercial	$ 18,975	25,410	22,098	26,934	25,200	27,342	18,600	-	17,955	18,790	19,740	13,000	-	-	-	-	234,044
Industrial	14,375	-	7,937	7,035	6,732	7,350	12,787	11,350	7,265	-	14,360	-	13,720	5,730	21,480	-	128,301
Residential One	-	-	8,005	5,628	4,018	4,118	1,733	-	-	-	-	-	-	-	-	-	23,502
Residential Two	-	-	-	4,223	4,410	-	-	-	-	-	-	-	-	-	-	-	8,633
Total sales	$ 33,350	25,410	38,040	43,820	38,360	38,810	33,120	11,550	25,220	18,790	34,000	13,000	13,720	5,730	21,480	-	394,480
Number of acres/lots sold																	
Commercial (acres)	55	70	58	67	60	62	60	0	35	35	35	22	0	0	0	0	539
Industrial (acres)	100	0	50	42	27	40	66	57	34	0	61	0	53	21	75	0	626
Residential One (1/2 acre lots)	0	0	90	60	41	60	16	0	0	0	0	0	0	0	0	0	267
Residential Two (1 acre lots)	0	0	0	35	35	0	0	0	0	0	0	0	0	0	0	0	70

Assumptions relating to land development:

Commercial price	$ 300,000.00 per acre (1983)
Industrial price	[illegible],000.00 per acre (1983)
Residential One price	70,000.00 per .5 acre (1983)
Residential Two price	90,000.00 per acre (1983)
Percentage inflation factor	5.00
Mortgage interest rate	9.00
Bank interest rate	11.00
Real estate fee percentage	3.00
Percentage down payment	15.00
Repayment of mortgages receivable	Equal instalments in 2 years following down payment

APPENDIX D

TRILLIUM DOME CORPORATION LAND DEVELOPMENT CASH FLOW ASSUMPTIONS

INTRODUCTION

We have separated the LAND DEVELOPMENT OPERATION from the DOME OPERATION. The payment of $30,000 per undeveloped acre with both closing down payment and discharge and/or interest to be borne by the Dome Operation for the 201.7 gross acres. The internal servicing of the Dome site has been assumed to be paid under the Dome Construction.

The City Land Development Concept Plan has been used as the basis for development.

The gross acreage has been reduced by obvious valley lands, and the residual reduced another 15% for roadways to produce the net acreage. The lands under the 35 NEP Noise Zones have been left undeveloped for residential purposes.

The approximately 60 acres of land under the 35 NEP Noise Zone between McLaughlin and Mavis Roads along Derry Road have not been considered either for revenues or development expense, but the $30,000 per acre has been retired. If the $30,000 per acre is recaptured it would add $1.8 million to revenue.

The 25 acres of table land at the east end of Derrydown Golf Course are to be developed industrially and the golf course enlarged on the property to the west.

The development of the lands has been assumed to occur firstly adjacent to the Dome site, thence linear along the existing routes working out from the Dome and thence in logical blocks along servicing and access routes. Since Courtneypark Drive will be required at the onset, we elected to service this route and permit development along Courtneypark Drive and Hurontario Streets as the initial phase. The next sequence would develop off these routes.

The Commercial lands would develop first to provide wide services to the many visitors. These services would attract industry to the centre to take advantage of, and bolster the off peak period.

APPENDIX D

SALES

LAND SALES ABSORPTION RATE

Commercial Lands	45 net developed acres per year over 12 years (assumed some speculative buying over first six years)
Industrial Lands	37 net developed acres per year over 15 years
Residential Lots	
One acre estate lots	35 per year average
One-half acre estate lots	50 per year average 90 for first year

DEVELOPED LAND SALE VALUES

Commercial	$300,000 net developed acre average
Industrial	$125,000 net developed acre average
1 acre residential estate lots	$ 90,000
Half acre residential estate lots	$ 70,000

REVENUE

LAND SALES TO PURCHASERS

The REVENUE has been based on a 15% down payment on net developed acreage, with a two year retirement period with 50% of the balance paid each year and 9% interest annually on balance.

EXPENDITURES

REAL ESTATE FEE

A real estate fee of 3% of the purchase price is assumed to be paid on closing.

APPENDIX D

SERVICING

Internal servicing development costs for roads, sanitary and storm sewerage, water supply, engineering, hydro and storm water management has been based on the following:

COMMERCIAL	$21,000 per gross acre
INDUSTRIAL	$24,000 per gross acre
RESIDENTIAL	$15,000 per lot

An analysis for the overall area indicated that it would be more expeditious for the Dome Group to construct arterial roads, and water course improvements than to pay the City levies for such. We assummed that the City would provide credits on levies. The road and watercourse improvement levies total approximately $8,800 per acre.

The Hydro now requires a levy of approximately $2,400 per acre to extend services to specific sites. Since we are developing the entire area, we have assumed this levy would be waived.

HIGHWAY & ROADWAY IMPROVEMENTS

Those road and highway improvements, directly attributable to the Dome, have been included in the land development cost. The arterial road costs included in this item would be normal if levies are waived. We have assumed an MTC grant towards these works and carried a cost of $16.5 million. The road improvements included are Hurontario Street, McLaughlin Road, Kennedy Road, Courtneypark Drive (all throughout the development area); grade separations at 410/10 for direct-slip off, 410 access west of Dome, Courtneypark and Dome; and the 401 collector lanes.

We have only taken 1300 feet on Mavis Road north of Highway 401 since Mavis has been made a Regional Road. We assumed the Region would improve the remainder of Mavis.

CITY PROCESSING FEE

The City fee for processing the plans is 3.5% of the Construction Works.

RESIDENTIAL LOT LEVY

We have assumed that the normal lot levy of about $5,000 would be paid to the City.

LETTER OF CREDIT AND INSURANCE COSTS

We have estimated these costs to be approximately 2.5% of the construction works, on the highest cost and reduced slowly with long term acceptances.

ADMINISTRATION COSTS

An annual fee has been included to cover overall management, accounting, legal, public relations, marketing, miscellaneous fees and costs to develop the lands over the total development period.

PARCEL DISCHARGE & INTEREST ON LAND

We have followed the latest agreement proposal forwarded to the Trillium Group land owners. We assumed closing would be in 1985 with 50% down; 9% interest to be paid on outstanding balance but accrued for first three years then paid, then interest payments annually; partial discharges are interfaced with sales and residual principal paid in 1990.

MUNICIPAL REALTY TAXES

Used $500 per year on outstanding balance of lands based on continued agricultural use prior to development.

INFLATION

We have added an annual 5% increase to both the revenue and expenses and accumulated these to be compatible with the work by others.

ADDITIONAL COMMENTS

Additional Income would be produced by placing positive cash flow on deposit (if it occurs interfaced with the Dome Operation). The lands under the noise zones should produce at least the value of the land if not a multiple.

APPENDIX E

TRILLIUM DOME CORPORATION

COMBINED PRO-FORMA CASH FLOW PROJECTIONS 1986 - 2001 ($ 000's)

RECEIPTS	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Land Division (Appendix A)	$5,000	$20,542	$33,887	$37,623	$45,568	$43,362	$42,217	$36,318	$24,820	$20,831	$26,220	$27,760	$24,756	$13,777	$12,262	$22,330
Dome Division (Appendix C)	0	0	0	0	0	0	0	0	0	113	932	3601	4477	5262	6032	6787
Debentures "A"	0	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debentures "B"	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital stock	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on cash balance	0	261	79	334	1,333	1,319	2,429	2,786	3,070	2,489	2,169	2,616	3,092	4,134	4,672	4,166
Total receipts	55,030	170,803	33,966	37,957	46,901	44,681	44,646	39,104	27,890	23,433	29,321	34,044	32,327	23,173	22,966	33,461
DISBURSEMENTS																
Dome land	3,000	3,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dome stadium	0	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Downpayment on land	27,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Division (Appendix A)	20,273	13,846	20,285	16,489	32,508	7,827	8,267	6,868	7,730	5,347	7,780	3,891	5,603	3,836	7,305	4,999
Dome Division (Appendix C)	0	6,303	6,347	6,162	6,084	3,316	2,410	1,559	710	0	0	0	0	0	0	0
Debentures "A"	0	0	0	0	8,000	8,000	8,000	8,000	8,000	8,000	8,101	8,000	8,000	8,000	8,000	8,000
Debentures "B"	0	0	0	0	0	10,000	10,000	10,000	10,000	10,000	0	0	0	0	0	0
Income taxes	342	0	0	0	0	1,776	10,125	9,262	7,703	4,049	6,620	9,237	8,658	6,237	11,799	3,030
Capital taxes	200	309	761	753	792	765	741	731	667	620	352	401	589	575	334	500
Total disbursements	51,295	173,478	27,393	23,404	47,384	31,684	39,543	36,420	34,810	28,016	22,928	21,529	22,850	18,648	27,438	16,529
NET CASH FLOW FOR YEAR	3,735	(2,675)	6,573	14,553	(483)	12,997	5,103	2,684	(6,920)	(4,583)	6,393	12,515	9,477	4,525	(4,472)	16,932
CUMULATIVE CASH BALANCE	3,735	1,060	7,634	22,187	21,704	34,701	39,804	42,488	35,568	30,985	37,378	49,888	59,363	63,888	59,190	76,122

APPENDIX F

TRILLIUM DOME CORPORATION

COMBINED PRO-FORMA STATEMENTS OF INCOME AND RETAINED EARNINGS PROJECTIONS 1986 - 2001 ($ 000's)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
LAND DIVISION																
Sales	$33,330	$25,410	$38,040	$41,820	$38,360	$38,810	$33,120	$11,550	$25,220	$18,790	$34,080	$13,000	$9,720	$5,730	$21,680	90
Cost of sales	12,107	9,285	15,900	14,012	14,017	14,182	12,103	4,221	9,214	6,866	12,453	4,750	3,013	2,094	7,049	0
Gross profit	21,223	16,125	22,140	27,808	24,343	24,628	21,017	7,329	16,006	11,924	21,627	8,250	6,707	3,636	14,631	90
Expenses:																
Real estate fees	1,010	742	1,143	1,313	1,140	1,161	992	364	732	373	1,013	306	415	171	641	0
Letter of credit/ins	313	195	163	167	225	133	160	113	136	167	94	79	42	43	28	40
Administration	1,150	1,219	1,270	1,366	1,950	1,470	1,330	1,596	1,716	1,930	1,890	1,878	2,089	2,205	3,285	4,959
Levies	0	543	633	616	337	0	293	0	0	0	0	0	0	0	0	0
Interest - Mtg. Payable	0	0	4,370	1,790	1,680	0	0	0	0	0	0	0	0	0	0	0
Total	2,473	2,711	7,583	5,126	5,332	2,763	2,775	2,073	2,584	2,470	2,997	2,263	2,546	2,419	3,954	4,999
Net income, before interest	18,750	13,414	14,557	22,682	19,011	21,865	18,242	5,256	13,422	9,454	18,630	5,987	4,161	1,217	10,677	(4,909)
Interest income on Mtgs.Rec	0	2,351	3,219	3,083	5,609	4,612	4,437	4,018	2,150	2,371	2,408	3,143	2,295	3,541	962	1,060
Net income Land Division	18,750	15,765	17,776	25,495	24,620	26,477	22,679	9,274	15,572	11,825	21,038	9,130	6,456	4,758	11,639	(3,849)
DOME DIVISION																
Net income/(loss) Dome Division (Appendix A)	0	(6,343)	(6,249)	(5,162)	(6,084)	(5,214)	(2,410)	(1,559)	(718)	113	932	2,884	6,477	3,262	6,032	4,787
Net income before depreciation, capital tax, interest on cash balance and income taxes.	18,750	9,422	11,527	20,333	18,536	21,263	20,269	7,715	14,854	11,937	21,970	12,014	12,933	8,020	17,671	3,690
Depreciation -2.5% straight	0	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)	(3,750)
Capital tax	(280)	(287)	(741)	(759)	(792)	(763)	(761)	(731)	(667)	(638)	(572)	(608)	(528)	(573)	(554)	(584)
Interest on cash balance	0	261	74	530	1,553	1,517	2,429	2,786	2,974	2,498	2,149	2,416	3,452	4,134	4,673	4,186
Income before income taxes	18,470	5,846	7,110	16,354	15,546	18,267	18,188	6,020	13,411	10,047	19,796	11,073	12,088	7,855	17,838	3,542
Income taxes-current	262	0	0	0	0	1,776	10,125	9,262	7,703	4,803	6,628	7,238	8,058	6,237	11,598	3,129
Income taxes-deferred	8,973	2,923	3,555	8,177	7,773	7,357	(1,031)	(6,252)	(997)	220	3,270	(1,701)	(2,014)	(2,310)	(2,679)	(1,358)
	9,235	2,923	3,555	8,177	7,773	9,133	9,094	3,010	6,706	5,023	9,898	5,537	6,044	3,927	8,919	1,771
Net income for year	9,235	2,923	3,555	8,177	7,773	9,133	9,094	3,010	6,706	5,023	9,898	5,537	6,044	3,927	8,919	1,771
Retained earnings:beginning	0	9,235	12,158	15,713	23,890	31,663	40,796	49,890	52,900	59,606	64,629	74,527	80,064	86,108	90,035	98,954
Net income for year	9,235	2,923	3,555	8,177	7,773	9,133	9,094	3,010	6,706	5,023	9,898	5,537	6,044	3,927	8,919	1,771
Retained earnings:ending	9,235	12,158	15,713	23,890	31,663	40,796	49,890	52,900	59,606	64,629	74,527	80,064	86,108	90,035	98,954	100,725

APPENDIX G

TRILLIUM DOME CORPORATION

SUPPLEMENTARY SCHEDULE PROJECTIONS 1986 - 2001 ($ 000's)
SCHEDULE OF MORTGAGES RECEIVABLE

SCHEDULE OF MORTGAGES RECEIVABLE	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Balance, beginning	$0	$26,250	$33,770	$43,140	$51,620	$51,240	$67,300	$44,640	$23,670	$26,340	$26,670	$36,930	$25,510	$17,170	$10,670	$20,670
Add: sales	32,250	25,400	30,040	41,820	28,360	38,810	15,120	11,330	25,440	18,790	33,080	13,000	11,730	5,710	21,000	0
Less: receipts	(6,000)	(17,880)	(20,670)	(33,340)	(28,740)	(22,750)	(37,780)	(32,300)	(22,770)	(18,460)	(22,820)	(24,420)	(20,070)	(12,210)	(11,000)	(20,670)
Balance, ending	26,250	33,770	43,140	51,620	51,240	67,300	44,640	23,670	26,340	26,670	36,930	25,510	17,170	10,670	20,670	0
Interest @ 9%	0	2,362	3,039	3,883	4,646	4,612	6,057	4,018	2,130	2,371	2,400	3,324	2,296	1,545	962	1,860
Land Division cash receipts	6,000	20,242	23,709	37,223	33,386	27,362	43,837	36,318	24,900	20,831	25,220	27,744	22,366	13,755	11,962	22,530

APPENDIX H

TRILLIUM DOME CORPORATION

SUPPLEMENTARY SCHEDULE PROJECTIONS 1986 - 2001 ($ 000's)
SCHEDULE OF INCOME TAXES

SCHEDULE OF INCOME TAXES

Income per F/S	18,470	5,845	7,110	16,354	15,546	18,267	18,188	6,020	13,411	10,037	19,796	11,073	12,088	7,855	17,858	3,742
Timing differences	(17,986)	(36,961)	(6,627)	(8,181)	(8,192)	(94)	2,063	12,504	1,994	(437)	(6,560)	7,402	5,628	4,619	5,738	2,318
Income for tax purposes	484	(31,116)	483	8,173	7,354	18,173	20,251	18,524	15,405	9,600	13,236	18,475	17,716	12,474	23,596	6,060
Cumulative	484	(30,632)	(30,149)	(21,976)	(14,622)	3,551										
Income taxes - current	242	0	0	0	0	1,776	10,125	9,262	7,703	4,804	6,620	9,237	8,858	6,237	11,798	3,030
- deferred	8,993	2,923	3,555	8,177	7,773	7,358	(1,032)	(6,252)	(997)	220	3,270	(3,701)	(2,814)	(2,309)	(2,879)	(1,259)
	9,235	2,923	3,555	8,177	7,773	9,133	9,094	3,010	6,706	5,023	9,890	5,536	6,044	3,928	8,919	1,771
Deferred Income Taxes	8,993	11,916	15,471	23,647	31,420	38,778	37,747	31,495	30,498	30,717	33,987	30,286	27,472	25,163	22,284	21,025

APPENDIX I

TRILLIUM DOME CORPORATION

COMBINED PRO-FORMA BALANCE SHEET PROJECTIONS 1986 - 2001
($ 000's)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
ASSETS																
Cash	$3,735	$1,060	$7,634	$22,187	$21,704	$34,701	$39,804	$42,488	$25,564	$30,981	$37,374	$49,008	$59,365	$63,890	$59,190	$76,130
Mortgages receivable	28,350	35,770	43,140	53,420	51,240	49,300	44,640	23,890	44,340	26,670	34,930	25,310	17,170	10,690	20,670	0
Land	64,143	63,923	57,630	49,510	47,169	38,353	31,723	32,297	20,229	23,475	15,741	12,232	10,075	9,390	5,900	5,900
Dome, at cost	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Accumulated Depreciation	0	(3,750)	(7,500)	(11,250)	(15,000)	(18,750)	(22,500)	(26,250)	(30,000)	(33,750)	(37,500)	(41,250)	(45,000)	(48,750)	(52,500)	(56,250)
Dome, net	0	146,250	142,500	138,750	135,000	131,250	127,500	123,750	120,000	116,250	112,500	108,750	105,000	101,250	97,500	93,750
Total Assets	$96,228	$247,003	$250,904	$263,867	$255,113	$253,604	$243,667	$222,425	$210,133	$197,376	$202,544	$196,300	$191,610	$185,220	$183,260	$175,780
LIABILITIES																
Debentures "A"	0	150,000	150,000	150,000	142,000	134,000	126,000	118,000	110,000	102,000	94,000	86,000	78,000	70,000	62,000	54,000
Debentures "B"	50,000	50,000	50,000	50,000	50,000	40,000	30,000	20,000	10,000	0	0	0	0	0	0	0
Mortgages payable	27,970	22,900	19,690	16,300	0	0	0	0	0	0	0	0	0	0	0	0
Deferred income taxes	8,993	11,916	15,471	23,647	31,620	38,778	37,747	31,495	30,498	30,717	33,907	30,206	27,472	25,163	22,296	21,025
Total Liabilities	86,963	234,816	235,161	239,947	223,620	212,778	193,747	169,495	150,498	132,717	127,907	116,206	105,472	95,163	84,296	75,025
SHAREHOLDERS' EQUITY																
Capital stock	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Retained Earnings	9,235	12,157	15,713	23,890	31,463	40,796	49,890	52,900	59,606	64,629	74,527	80,064	86,108	90,033	98,934	100,725
Total Shareholders' Equity	9,265	12,187	15,743	23,920	31,493	40,826	49,920	52,930	59,636	64,659	74,557	80,094	86,138	90,063	98,964	100,755
	$96,228	$247,003	$250,904	$263,867	$255,113	$253,604	$243,667	$222,425	$210,133	$197,376	$202,544	$196,300	$191,610	$185,220	$183,260	$175,780

POOR

QUALITY

ORIGINAL